

DATE POSTED: AUGUST 18, 2023

AGENDA
CHARTER TOWNSHIP OF LONG LAKE
PLANNING COMMISSION
LONG LAKE TOWNSHIP HALL
8870 NORTH LONG LAKE ROAD
TRAVERSE CITY, MI 49685

TUESDAY, AUGUST 22, 2023
REGULAR MEETING

1. CALL TO ORDER – 6:00P.M.
2. ROLL CALL
3. APPROVAL OF AGENDA
4. CONFLICT OF INTEREST STATEMENT (Declare and cite agenda item.)
5. BRIEF PUBLIC COMMENT (Any person may speak for up to 3 minutes.)
6. APPROVAL OF MINUTES:
 - A. JUNE 20, 2023 (study session)
 - B. JUNE 27, 2023 (regular meeting)
 - C. JULY 10, 2023 (study session)
7. POSTPONED BUSINESS: NONE
8. PUBLIC HEARINGS: NONE
9. PENDING BUSINESS:
 - A. MASTER PLAN DISCUSSION
10. NEW BUSINESS:
 - A. SPR 08-23-07 – A REQUEST BY APPLICANT MIDWEST V, LLC AND OWNER ADDISON AND BONNY WHEELOCK TRUSTS FOR DOLLAR GENERAL RETAIL STORE ON A PORTION OF PIN 28-08-017-016-02.
 - B. EVERGREEN RESIDENTIAL PUD -- PROPOSED PHASING PLAN
 - C. CEDAR RUN ACRES – APPROVAL EXTENSION

Time posted: _____
Signature: _____

11. BRIEF PUBLIC COMMENT (Any person may speak for up to 3 minutes.)
12. REPORTS
13. CORRESPONDENCE
14. COMMISSIONERS COMMENTS
15. ADJOURNMENT

IF YOU ARE PLANNING TO ATTEND THE PUBLIC MEETING AND REQUIRE REASONABLE SPECIAL ASSISTANCE, PLEASE CONTACT RONDA ROBINSON, TOWNSHIP CLERK AT (231)946-2249, (T.D.D. 800-649-3777) AT LEAST TWO DAYS PRIOR TO THE SCHEDULED MEETING DATE.

PUBLIC COMMENT/INPUT POLICY

Any person shall be permitted to address a meeting of the Long Lake Township Planning Commission which is required to be open to the public under the provisions of the Michigan Open Meetings Act, as amended. (MCLA 15.261, et. seq.) Public comment shall be carried out in accordance with the following Commission Rules & Procedures:

A person wishing to speak must be acknowledged by the Chair before speaking

The speaker will give their name and address for the record

The speaker will be limited to 3 minutes

The speaker will only address comments to the chair – not the applicant, staff, or others in the audience

The Commission will listen to comments and questions and will not respond, except to clarify.

No speaker may speak twice unless all others who wish to speak have had an opportunity to speak. In the Chair's discretion, a speaker may speak more than once if there are new issues or questions brought forward.

Groups of 10 or more have the option of selecting a spokesperson, who may speak for up to 15 minutes.

Any person may make a video or audio recording of the meeting. Standing equipment, cords, or portable microphones must be located to the right side of the meeting room for safety and so as not to block audience view.

CHARTER TOWNSHIP OF LONG LAKE
PLANNING COMMISSION
LONG LAKE TOWNSHIP HALL
8870 NORTH LONG LAKE ROAD
TRAVERSE CITY, MI 49685

TUESDAY, JUNE 20, 2023
STUDY SESSION

MINUTES

1. CALL TO ORDER: By Chairman Verschaeve at 6:00 P.M.
2. ROLL CALL: Board members present were Rademaker, Figura, Murphy, Bott, and Verschaeve. Wiand and Severt were absent and excused. Also present were Leslie Sickterman, Township Planner, and Heidi Mello, Recording Secretary.
3. APPROVAL OF AGENDA: Motion by Rademaker and support by Murphy to approve the Agenda, as presented. Carried.
4. BRIEF PUBLIC COMMENT: Corbin Buttleman, 130 N Spruce re: rezoning
5. MASTER PLAN DISCUSSION:

Sickterman explained the Master Plan (MP) summary and wanted to focus the discussion on Transportation, Goals & Objectives, and the Future Land Use Plan.

Sickterman provided a County transportation map with PASER ratings. Rademaker did not agree with the North Long Lake Road rating; he thought it should be higher. Sickterman said the Road Commission has conceptual plans to build a double kidney-shaped round-about that encompasses East Long and Strait Roads plus Moomers. This area should be called out as a corridor of distinction in the North Village Center. Also on the Future Land Use Plan (FLUP) is the start of a non-motorized plan to connect, with pathways, Timbers, Twin Lakes, Long Lake Elementary and the Food for Thought Campus. Another connection between the Township Hall and Taylor Park is called for in the multi-modal plan.

Rademaker asked if there is a Parks plan as this would help with pedestrian planning. Sickterman explained the Recreation Plan was separate. Sickterman reminded the Board that there was a planned Open House on July 20, 2023 for the public to come see the MP up close, ask questions and leave comments. She wants the bulk of the MP finished by then; calling this “a plan to plan,” as it will be generalized and conceptual. She will include a map to show the connectivity of the paths representing the wishes of the residents.

Sickterman asked about the Village Center areas. Rademaker thought the Board needed to discuss moderate density in a wider scope, including the Trailer Park. Sickterman said a rezoning request is coming before the Board next week asking for the Ritola property to go from Agricultural (Ag) to Low Density Residential (LDR). The current MP calls for LDR. Also, the FLUP does not have an Ag designation.

Rademaker wondered how Bridlewood could be LDR. Manhattan is moderate. The trailer park could be developed under a Town Center Residential PUD option which would get them to moderate. Sickterman said the mobile home park is currently zoned Local Business. The owners could remove the mobile home park and put in a local business, but with current zoning, they could not expand. The MP calls for a change in zoning to allow for more park or High Density Residential (HDR). If the mobile home park is in the Activity Center, there needs to be a discussion of the Northern area plan boundaries of the activity center to see if they still make sense.

Bott asked if the Village Center includes the subdivision North of Strait Road. Sickterman wondered if it functioned as part of a Village Center. Rademaker thought it was an existing moderate density sub only.

Sickterman believes that in pre-existing grandfathered zoning areas, such as Lake Residential (LR) or Low Density Residential (LDR), it makes sense to update the zoning to have flexibility on minimum lot sizes to expand what low density is. Bott believes densities are being misrepresented.

Sickterman pointed out maybe part of the Future Land Use Comprehensive Plan says we need to update the zoning categories to more closely represent what exists there. The problem being, without sewer and water, the Health Department does not want us to have anything other than one-acre zoning. If the Township makes it use-by-right, in some places, we might be making promises we cannot keep.

Rademaker reminded the Board that anything under an acre requires Health Department approval. He believes the Board could surround the entire map with moderate density zoning.

Murphy wondered if there was a Township plan for sewers. Rademaker said it had been discussed but came with a giant price tag. Bott said it was like Bear Lake.

Sickterman said rather than upzone the entire Township, she thinks a change in the LDR to mirror reality is better. If you are creating a new lot in a LD, it is still an acre, but if you have existing lots that are smaller, they are not non-conforming, they are smaller lots that legally exist with different setbacks. Rademaker does not think this solves the issue. He referred to a Township survey stating the residents' top priorities are improving existing commercial areas and expanding housing choices. Bott said the survey is difficult to read and the results look backwards. The residents' top priorities are protecting natural resources. Improving commercial areas is number ten.

Bott asked if the Future Land Use Map is different than the actual zoning map? Sickterman said yes; generally the map should coincide with the zoning that is out there for most of the Township. In areas where more intensity would be tolerated, those should be a planned district. Sickterman went on to explain that the MP says current zoning is what should remain and there are only a few key areas where it is different. Changing all the colors on the MP could change everyone's zoning. Maybe a description of LDR on the future plan should reflect a combination of half-acre lots, LR zoning, LDR zoning and larger five to ten acre lots. This has more to do with how you want to see it zoned in the future.

Murphy wondered if there was a county sewer plan. Sickterman said historically the Township has not wanted it. Rademaker said the lots could be smaller so it would create sprawl.

Rademaker stated that in regards to the existing zoning map, the Ritola property should be moderate as well as everything else along that corridor. He wants higher density kept away from the lake.

Murphy wondered if the trailer park could expand in the back and screen the front. Sickterman said if the GTCRC gets their grant, the first row of trailers along North Long Lake Road would be removed. Rademaker said they would be relocated to the back of the property. Sickterman said the Road Safety Audit called for the removal of the tree along North Long Lake for clear vision.

Rademaker said sections 10, 11, 12 and 14 should be discussed for densities; section 14 includes the Plummer farm.

Bott said Black Bear is high density but the parcel to the west is moderate. Sickterman wondered if sections 10, 11 and 12 should be split in half north to south. Rademaker asked if the north half of 10, 11 and 12 should be moderate density? Sickterman said she was only asking if they should be looked at as half sections as the halves were different in some cases. Rademaker said the south half of 11 and 12 is Twin Lakes Park and our Town Center. He believes we should surround the school with moderate density. Sickterman agreed the properties are connected and walkable.

Sickterman thought it was a good idea to draw a hard line where Ag is zoned, including the Plummer, Gallagher and Hall properties. She wondered if it made sense to have doughnut holes surrounded by moderate density.

Figura asked if there was high density on the Future Land Use Map as some properties are zoned HD but fall under moderate. Figura thinks not, as the Township does not want to add more HD. Sickterman wondered if there should be a new HD plan district in the Future Land Use Map for everything with Gray Road frontage. Rademaker believes the parcel to the west of County Eden could be high density also. Bott stated it is all moderate on the FLUP.

The Board members discussed moderate density but did not agree what that should look like on a future map.

Figura asked Rademaker if he had looked at The Township MP survey priorities which show protections for natural resources and open spaces. Figura believes the Board is getting ahead of the Public Comment on this Plan and that is what the Open House is for.

Rademaker believes densities should be near roads, schools, parks and Town Centers; leave everything around the lake, all the other farmlands, and the natural features alone. He doesn't believe there should increased density near Lake Ann nor on the West side of the lake.

Sickterman believes that in order to protect open space you must allow density to go somewhere and allow it in concentrated areas, but everyone must buy in. Figura stated that with moderate density and a PUD option, a cluster could be built, and open space could be set aside. Bott agreed. He questioned the parcel southwest of the Town Center, which is LD on the current zoning map, and includes Lamp Post and Hunters Ridge. Sickterman would prefer to stop at the half section of 14, concentrating on East Long Lake Road and going east from there, not including current Ag.

Figura reminded the Board that if they allowed a PUD, the larger parcels would not need to be increased to moderate on the FLUM.

Verschaeve questioned adding HD to the FLUM, stating the highest densities were planned for the worst roads. There are already transportation issues along that corridor.

Sickterman asked about the Wistrand property explaining that the north ten acres are currently zoned LD and the remaining south 27 acres are Ag. Rademaker believes it should all be moderate density except for the Village Center which lines up with his development, Huellmantel.

Figura asked if Huellmantel was zoned LD, and if by increasing it to moderate density would it not make it denser? Sickterman said it is one-acre density with similar lot sizes.

Sickterman stated she recognized the Board was not in agreement with the moderate density on the FLUM, but she needed a starting point. Figura said he appreciated a starting point but is concerned about Huellmantel. It makes more sense to him for Manhattan to be moderate density on the FLUM. Sickterman agreed to have summary results for the Board by next week.

Motion by Bott and support by Figura to adjourn.

6. ADJOURNMENT: Verschaeve adjourned the meeting at 8:04 P.M.

TIM FIGURA, SECRETARY
LONG LAKE PLANNING COMMISSION

HEIDI MELLO, RECORDING SECRETARY
LONG LAKE PLANNING COMMISSION

NOTE: THESE MINUTES ARE SUBJECT TO AMENDMENT AND/OR CORRECTION PRIOR TO THEIR ADOPTION.

MINUTES
CHARTER TOWNSHIP OF LONG LAKE
PLANNING COMMISSION
LONG LAKE TOWNSHIP HALL
8870 NORTH LONG LAKE ROAD
TRAVERSE CITY, MI 49685

TUESDAY, JUNE 27, 2023
REGULAR MEETING

MINUTES

1. CALL TO ORDER: By Chairman Verschaeve at 6:00 P.M.
2. ROLL CALL: Board members present were Wiand, Rademaker, Figura, Murphy, Severt, Bott, and Verschaeve. Also present was Leslie Sickterman, Township Planner.
3. APPROVAL OF AGENDA: Motion by Rademaker and support by Wiand to approve the Agenda, as presented. Carried.
4. CONFLICT OF INTEREST: None.
5. BRIEF PUBLIC COMMENT: None.
6. APPROVAL OF MINUTES:
 - A. Motion by Murphy and support by Severt to approve the Minutes of the meeting held on May 23, 2023. Carried.
7. POSTPONED BUSINESS: None.
8. PUBLIC HEARINGS:
 - A. ZOA 06-23-03 – A REQUEST BY APPLICANT AND PROPERTY OWNER JUDY RITOLA TO REZONE PROPERTY IDENTIFIED AS 8660 NORTH LONG LAKE ROAD, PARCEL NUMBER 28-08-010-022-02. THE 77.59 ACRE PARCEL OF LAND IN THE WEST HALF OF SECTION 10 HAS APPROXIMATELY 607 FEET OF FRONTAGE ON NORTH LONG LAKE ROAD AND IS CURRENTLY DEVELOPED AS A SINGLE FAMILY RESIDENCE. THE REQUEST IS TO REZONE THE ENTIRE PARCEL FROM AGRICULTURAL (MINIMUM 2 ACRE LOT SIZE) TO LOW DENSITY RESIDENTIAL (MINIMUM 1 ACRE LOT SIZE).

1. PRESENTATION OF REQUEST AND RECOMMENDATION BY PLANNER/STAFF:

The request is for a change in zoning from AG Agricultural to R-1 Low Density Residential for property in the west half of Section 10. The 77.59 acre parcel of land has approximately 607 feet of frontage on North Long Lake Road and is currently developed as a single family residence. The request is to rezone the entire parcel from Agricultural (minimum 2 acre lot size) to Low Density Residential (minimum 1 acre lot size).

The property under consideration includes a house, 2 detached garages and a barn – all confined to the southern end of the property. Approximately 50 acres have been farmed historically on the property, the remaining 27 acres on the north end is left undeveloped. The woodlot on the undeveloped portion is about 10 acres of conifer and 17 acres of high quality upland hardwood trees that is part of a Priority Two natural area as identified in the Natural Features Inventory. The woodlot includes a small (approximately ½ acre) wet area. The site is relatively flat but there is some gentle topographic relief throughout the span of the property.

The 77.9 acre site could theoretically support up to 77 residential units under the Low Density Residential zoning designation depending on the development option – double that under the current Agricultural zoning. If this is developed conventionally with no open space and 1 acre lots, with an assumed set aside of 5 acres for the existing homestead, and 30% for roads and other infrastructure, this property could reasonably support 50 additional lots, generating an estimated 500 vehicle trips per day (doubled that expected under the current zoning). Assuming most of these trips access North Long Lake Road, the road will increase from an estimated 7,500 trips per day (the closest known road count from 2013) to 8,000. Other than M-72, this is the highest traffic count in the Township, but these counts are still well below the expected capacity for the road. This property allows for connections into at least two other public road stubs, allowing for the dispersal of traffic generated from this site.

Adjacent to the subject to the east is the Long Lake Township fire station sharing frontage along North Long Lake Road. To the west is Manhattan Estates, a subdivision with a mixture of single family, duplex, and fourplex dwellings zoned Moderate Density Residential (minimum ½ acre lots). To the east is the Lake of the Pines subdivision, to the north is Glenwood Waters subdivision. Both of these subdivisions are developed with lots averaging approximately 1

acre and all are zoned Low Density Residential. Adjacent to the northwestern boundary of the subject is undeveloped land that is zoned Low Density Residential. Across North Long Lake Road to the south is a mixture of lot sizes occupied by single family residential

uses and all zoned Low Density Residential. The current Township Comprehensive Plan identifies Section 10 and the surrounding area as being planned for Low Density Residential.

The decision by the Planning Commission on this application will be in the form of a recommendation to the Township Board, the final approving authority on rezoning requests.

2. COMMENTS AND EXPLANATIONS BY APPLICANT: Felicia Randall, Ritola's real estate agent, explained there were no current plans to develop the parcel. Also, the site is actually 72.9 acres as five will be split off for the current homestead.

3. QUESTION/DISCUSSION BY COMMISSIONERS:

Figura questioned the Future Land Use Map's designation of AG for this parcel. Sickterman explained he was looking at the unadopted draft of the new FLUM, but the current FLUM had this parcel designated for LDR. Figura asked if this current working FLUM was the 2005 edition. Sickterman said yes.

Verschaeve asked if the parcel was currently for sale. Ritola said yes.

Severt wondered if the Priority 2 Natural Features would be protected. Sickterman said the Ordinance has protection options. Severt wondered if the stub roads could be required to connect. Sickterman said the Road Commission could require it, but the Township's Road Ordinance requires connections at road ends. Severt also questioned where the road would be and whether the infrastructure could handle another 500 cars per day on North Long Lake Road. Sickterman said the road would have to be situated close to the Fire Department, but the final say would come from the Road Commission.

4. OPEN PUBLIC HEARING TO PUBLIC COMMENT:

Verschaeve opened public comment at 6:25 P.M.

Leanne Sleder, 4529 Bridlewood re: road ends

Karen Brayton, 8422 North Long Lake re: road is too busy now

5. CLOSE PUBLIC HEARING TO PUBLIC COMMENT:

Verschaeve closed public comment at 6:34 P.M.

6. DELIBERATION BY COMMISSIONERS:

Wiand stated that without staff conditions, this seems straight forward.

Murphy said the Road Commission will handle the ingress and egress and work with the Township.

Verschaeve stated that this rezoning fits in with what has been recently discussed with the FLUM planning.

Figura explained that with the current 2005 Master Plan (MP) in place, this decision is seemingly out of the hands of the Board. This parcel is designated for LDR as the future use and is compatible with its neighbors' uses.

Rademaker agrees with Figura about compatible uses, it is on the FLUM as LDR and he believes the request is reasonable.

Severt agrees that this is consistent with the MP.

Bott agrees; this area was discussed for development.

7. DISPOSITION BY THE COMMISSION; APPROVE, APPROVE WITH CONDITIONS AND/OR RECOMMENDATION, TABLE, DENY. ALL STATED WITH FINDINGS OF FACT, CONDITIONS AND RECOMMENDATIONS:

Motion by Murphy and support by Bott to recommend to the Township Board, as provided in the Staff recommendation, to approve the rezoning of 28-08-010-022-02. Carried.

B. CLU 06-23-03 – A REQUEST BY APPLICANT AND PROPERTY OWNER COURTNEY HUNT TO ESTABLISH A GROUP CHILDCARE HOME AT 4677 SANDTRAP DRIVE. THIS ½ ACRE LOT WITH 150 FEET OF FRONTAGE ON SANDTRAP DRIVE IS LOCATED IN THE CEDAR HILLS ESTATES CONDOMINIUM SUBDIVISION AND IS ZONED MODERATE DENSITY RESIDENTIAL. THE SUBJECT PARCEL IS FURTHER IDENTIFIED AS PARCEL NUMBER 28-08-079-020-00.

1. PRESENTATION OF REQUEST AND RECOMMENDATION BY PLANNER/STAFF:

The subject property is located in Section 11 of the Township on a parcel of approximately 0.5 acre located on Sandtrap Drive in the Cedar Hills subdivision. The lot is addressed as 4677 Sandtrap Drive and is currently the location of a single-family home with an attached garage and an additional shed that is approximately 185 square feet in area. The lot for the subject home is 150 feet wide and 161 feet deep. All adjacent lots are of similar size and use. The rear yard is fenced in as are the neighboring lots. The owner has run a family day care home, licensed to care for up to 6 children, at this home for approximately two years. The neighboring property immediately north of the subject is the location of another group daycare home licensed to care for up to 12 children for approximately three years and a family daycare home licensed to care for up to 6 children for one year prior to becoming a group daycare home.

The applicant's current license allows the her to care for up to 6 children in her home. The applicant proposes to change the license to a Group Daycare which would allow her to care for up to 12

children.

In the Low Density Residential district, group childcare homes are allowed only as a conditional land use. A public hearing is required as with all conditional uses considered by the Planning Commission. All neighboring property owners and residents within a minimum of 300 feet were notified of the public hearing and a notice was advertised in the newspaper as required by law.

Staff recommends approval of conditional use permit for Courtney Hunt for a group childcare home allowing for care for up to 12 children at 4677 Sandtrap Drive with the following conditions:

1. Applicant to obtain a license from the State of Michigan for a group childcare home and such license will remain in good standing and in compliance with all licensing requirements.
2. In order to obtain a license, the neighboring group home must be closed. Therefore, this approval is subject to the closure of the group childcare home at 4705 Sandtrap.
3. The applicant to maintain hours of operation of 7:00 a.m. to 4:30 p.m.
4. The applicant to maintain the property in a manner consistent with this residential neighborhood.
5. The applicant to obtain a Township permit for a sign for a home childcare if any is proposed in the future.
6. The applicant to maintain a minimum of 4 parking spaces in the driveway or garage available for parents or employees during daycare hours and to stagger drop off and pick up times to avoid conflicts.
7. The applicant to obtain a land use permit for the shed within 6 months of the date of this approval.

2. COMMENTS AND EXPLANATIONS BY APPLICANT: Hunt had nothing to add saying she was available to answer any questions.

3. QUESTION/DISCUSSION BY COMMISSIONERS:

Bott asked if licensing was an issue if the other group daycare did not close. Hunt said 4705 Sandtrap was under contract.

Wiand asked if the owner of 4705 could transfer the license with the property.

Sickterman said no.

Severt asked if the hours should be restricted. Sickterman said the State restricts the daily hours to sixteen, but the applicant chooses which timeframe to be open. Severt also questioned the necessity of signage conditions.

Murphy asked if the Township needed to keep track of Hunt's State licensing. Sickterman said the State requires a one-time approval.

4. OPEN PUBLIC HEARING TO PUBLIC COMMENT:

Verschaeve opened public comment at 6:55 P.M.

5. CLOSE PUBLIC HEARING TO PUBLIC COMMENT:

Verschaeve closed public comment at 6:56 P.M.

6. DELIBERATION BY COMMISSIONERS:

Verschaeve stated that childcare is needed in the Township.

7. DISPOSITION BY THE COMMISSIONS; APPROVE, APPROVE WITH CONDITIONS AND/OR RECOMMENDATION, TABLE, DENY. ALL STATED WITH FINDINGS OF FACT, CONDITIONS AND RECOMMENDATIONS:

Motion by Severt and support by Bott to approve the request for a group daycare pursuant to staff recommendations 1, 3 (amended to be open until 5:30 P.M.), 4, 6 and 7. Carried.

9. PENDING BUSINESS:

A. MASTER PLAN DISCUSSION

Sickterman explained she had combined the study session work and had a proposed density map for discussion. It included moderate density around the school, along the half-section line and extending along East Long Lake Road, south of the Village Center.

Rademaker agrees East Long should be moderate.

Sickterman explained this proposed map keeps the Plummer, Froelich, Hall & Gallagher farms as AG.

Rademaker and Bott discussed keeping the half section of 14 as LD, rather than moving to Moderate.

Sickterman said half of the lakefront lots are non-conforming, and the MP should reflect this difference. She also proposed creating a color-coded map showing lot sizes by half-acre increments in order to see patterns of development.

Bott said sometimes density calculations make more sense than lot size calculations. Figura agreed.

Sickterman reminded the Board that there was a Public Hearing on July 20, 2023, and asked if they wanted to have another study session prior. There was agreement.

Bott said development and public utilities should go along the major roadways.

Severt pointed out two miscolored moderate densities on the FLUM draft. Sickterman said the Board should be parcel-specific at this point.

Sickterman wondered about moderate-density Manhattan being joined to the Hamlet, Township Hall and the parks as one area. Rademaker thinks it is too close to the lake and should revert to R-1 on the FLUM. There was agreement.

Sickterman asked about density on the Wistrand property. There was not agreement and the Board discussed possible conditions on development. Sickterman explained this was the area of most concern to the public based on phone calls she has received. Rademaker stated Moomer's property was the hazard to the intersection due to the parking issues and does not meet the intent of their permit to operate. Murphy agreed there is no driveway definition. Rademaker said the Township requires driveways to be paved and the adjoining property is not paved.

Motion by Rademaker and support by Murphy to extend the meeting by 30 minutes. Carried.

10. NEW BUSINESS: None.

11. BRIEF PUBLIC COMMENT:

Corbin Buttleman, 130 Spruce re: MP process

12. REPORTS:

A. ZONING ADMINISTRATOR REPORT

Matt Jerome, Zoning Administrator, discussed major and minor accessory buildings with the Board.

Rademaker reported that the Township Board approved Cornwell architects to move ahead with the plan generation, approved the fireworks display, and approved Wolverine Power to run facility lines.

13. CORRESPONDENCE:

Craig Capell, 4581 Lakepine

14. COMMISSIONERS COMMENTS: None.

Motion by Bott and support by Severt to adjourn the meeting.

15. ADJOURNMENT: Verschaeve adjourned the meeting at 8:28 P.M.

TIM FIGURA, SECRETARY
LONG LAKE PLANNING COMMISSION

HEIDI MELLO, RECORDING SECRETARY
LONG LAKE PLANNING COMMISSION

NOTE: THESE MINUTES ARE SUBJECT TO AMENDMENT AND/OR CORRECTION PRIOR
TO THEIR ADOPTION.

DRAFT

CHARTER TOWNSHIP OF LONG LAKE
PLANNING COMMISSION
LONG LAKE TOWNSHIP HALL
8870 NORTH LONG LAKE ROAD
TRAVERSE CITY, MI 49685

MONDAY, JULY 10, 2023
STUDY SESSION

MINUTES

1. CALL TO ORDER: By Chairman Verschaeve at 4:30 P.M.
2. ROLL CALL: Board members present were Figura, Bott, Severt, Wiand and Verschaeve. Murphy was absent. Rademaker was absent and excused. Also present was Leslie Sickterman, Township Planner.
3. APPROVAL OF AGENDA: Motion by Figura and support by Severt to approve the Agenda, as presented. Carried.
4. BRIEF PUBLIC COMMENT: None.
5. MASTER PLAN DISCUSSION:

Sickterman reminded the Board about the July 20, 2023, Open House for the public to view the Recreation Plan and the Master Plan (MP). She asked the Board to volunteer some time to answer questions and talked about the importance of feedback from the residents. These responses would be gathered, the Planning Commission would have another workshop, and then the Draft would go to the Township Board for final approval. Severt asked if the Township could extend the MP display beyond July 20. Sickterman agreed saying the information would also be on the Township website.

Wiand asked about the Natural Features Map explaining the need for this tool when discussing PUDs, and asked if it could become part of the MP to be used as a guide. Sickterman said GEI has been contracted to update the Natural Features Inventory and it will become part of the MP, though it will be structured like a greenways plan, irrespective of property lines. Wiand said a developer should know the Planning Commission will prioritize the Natural Features Inventory.

Severt asked about the large area of moderate density (MD) in the NE corner and questioned if Section 11 should be MD on the eastern half only. Sickterman said Century Farms, on the western half, is zoned MD but the lots are one-acre. Bott said the previous thought was to keep MD around the school, but if the Century Farms PUD is one-acre, it makes sense to keep the remaining parcels Low Density Residential (LDR). Severt said LDR makes sense butted up to Agriculture (AG). Figura said the prior FLUM showed LDR. Sickterman said Hall's is Ag, maybe LDR is a good buffer between AG and MD near the school. Bott said he was good with the buffer in Section 11. Sickterman said that historically the NE corner has been MD for a long time and the proposed additional MD added to the FLUM has been along East Long Lake Road and in areas of Section 11.

Bott asked about the AG in the south half of Section 12; Lindhurst and Gallagher's south of Black Bear. Sickterman said she expects a lot of pressure in the future to rezone Section 13. She also explained the NW side of Garfield Township is primarily AG. Severt thought it could remain AG, be consistent with what is next to it and still have development options. Figura spoke about the challenging process, saying the Board wants to reflect what is going on, but that is not what the MP is for. Also, the FLUM is opening up rezonings. Bott asked if Gallagher's stays AG, couldn't a developer have options of a PUD like Lindhurst. Sickterman said yes.

Sickterman asked if there was a consensus on Century Farms LD. Severt said yes. Figura thought the whole west quarter should be LD. Bott said the west property line of the old school to the west property line of Cedar Valley. Verschaeve and Bott agreed on this as LD.

Bott said Lindhurst and Gallagher's should remain AG as the next over in Garfield is AG. There was agreement.

Sickterman said there is pressure on the Township to develop, but not in the areas already planned for it, Century Farms and along Barney Road. Sickterman went on to say that part of what makes this Township special is the undeveloped areas, rolling hills and woodlots between neighborhoods. The contrast is good. She wondered if there was enough MD. Bott said he thought there was enough. There is a lot undeveloped. Severt reminded the Board that even though they were talking about a 20-25 year MP, that plan should be reviewed every five years to see if anything needed to be changed. Sickterman agreed.

Verschaeve said it was hard to place MD on the map without utilities in place. There are so many developments already planned for.

There was consensus for AG along M-72.

Sickterman spoke regarding Strait and East Long Lake Roads, saying the Grand Traverse County Road Commission (GTCRC) is currently looking at grants to do a peanut-shaped roundabout. Discussion continued with Village Centers and commercial uses with a consensus on, under 5,000 square feet is a use by right and more requires a conditional use review, which might have additional requirements. Verschaeve asked if these were zoning details. Sickterman said yes, but in order to justify a zoning ordinance change, and give a roadmap to tell the Board to do it, it should be in the MP. Sickterman believes the Activity Center should have a higher level of review for all commercial uses as well as higher design standards. Severt wondered if it should be the same for all three Activity Centers. Sickterman thought yes. Verschaeve agreed.

The Board discussed the Trail Plan and adding additional pathways to the map.

Motion by Bott and support by Wiand to adjourn. Carried.

6. ADJOURNMENT: Verschaeve adjourned the meeting at 6:20 P.M.

TIM FIGURA, SECRETARY
LONG LAKE PLANNING COMMISSION

HEIDI MELLO, RECORDING SECRETARY
LONG LAKE PLANNING COMMISSION

NOTE: THESE MINUTES ARE SUBJECT TO AMENDMENT AND/OR CORRECTION PRIOR
TO THEIR ADOPTION.

Memorandum

To: Planning Commission

From: Leslie Sickterman, Township Planner

Date: August 16, 2023

Re: Master Plan Draft

Attached is the following

- **Master Plan Summary.** This is a short summary of the Master Plan draft and significant changes from the current Master Plan. I'm also including the summaries of each plan topic area presented at the Open House. I am not including another full version of the Master Plan draft as it is available on the township's website and has been included in recent packets. (Look under "Events" heading on the home page of the Township's webpage www.longlaketownship.com)
- **Comments from Open House** A summary of the comments received at the public open house on July 20th and on the on-line questionnaire. Refer to the summary sheets included in the summary.
- **Approval Schedule and Recommended Motion**

Master Plan Summary

Section 1. Introduction

Chapter 1. Introduction, pages 1-8

The 2023 draft of the Master Plan includes an extensive history of the Township that was added to Chapter 1. The explanations of the Plan methodology and organization were updated as needed to reflect the 2023 version. It should be noted that the Plan is referred to as the Master Plan throughout the 2023 Draft. This is in recognition of the terminology in the Michigan Planning Enabling Act.

Section 2. Community Profile

Chapter 2. Natural Features and the Environment, pages 9-22

This section of the draft Plan is very similar to the current Plan. The topography, lakes, soil profiles, wetland and woodlands have, of course, not significantly changed. The maps have been redesigned. The maps are no longer in an 11x17 format, have been streamlined, and include updated roads.

The discussion on lake water quality beginning on page 15 has been updated on the draft Plan with refinements provided by Len Klein.

Beginning on page 16, a new section discussing dark skies has been added.

Beginning on page 18, the discussion on climate has been updated to include more up-to-date information from NOAA.

The current Plan includes a discussion of the Community Forestry Plan. The draft Plan includes a discussion of the Natural Features Inventory and the planning considerations beginning at the end of page 19.

The discussion of endangered threatened, and special concern species has been shortened under the draft Plan (page 20). This is due to the lack of information as Michigan's Natural Features Inventory is no longer funded and updated by the state.

On page 21, the map depicting the elevation of groundwater has been changed from the equivalent map (Map 6) in the current Plan. The difference is due to the geospatial data that is available on a state-wide basis. The Planning Commission has noted during discussions that the information included in the draft Plan on Map 5 is generalized and based on an algorithm, not actual field data.

Chapter 3. Demographics, pages 23-29

This Chapter uses the same general format as the current plan with updated decennial census information. As the Township routinely updates the Master Plan, this Chapter should be updated with the latest information available. A full count is only available with the decennial census, but the annual American Community Survey provides estimates that can be used to approximate the population counts and other demographic benchmarks.

Chapter 4. Housing, Income and Economic Development, pages 30-38

Similar to Chapter 3, this Chapter follows the basic format and informational content of the current plan with updates relating to the 2020 decennial census.

Chapter 5. Land Use and Development Patterns, pages 39-52

This Chapter departs from the current Plan in part because the prior information sources are no longer available. The Planning Commission felt that the MRLC mapping and analysis represented a means to approximate this information and the analysis was expanded where possible to relate directly to the township.

Chapter 6. Transportation and Community Facilities, pages 53-61

This Chapter is similar to the current Plan but has been updated with current information. PASER rating information and map has been added.

Section 3. Comprehensive Plan

Chapter 7. Goals & Objectives, 62-71

Notice that there is a Planning Considerations heading at end of each Chapter in Section 2 that summarizes what the implications are of the information in that Chapter. Along with public input, this forms the basis for the Comprehensive Plan. The Plan is comprised of Chapter 7, Goals and Objectives, Chapter 8. Future Land Use Plan, and Chapter 9, Implementation. Ideally, the Plan components relate back to the information in Section 2 and are knit together to reference back and forth and establish a clear reasoning for all of the new regulations, further planning, and programs that are called for under the Plan.

Chapter 7 includes goal statements (broad inspirations) and objectives (steps to achieve the goal). Many of the objectives are repeated because they address more than one goal. These are updated from the current Plan but are closely aligned to the current Plan. That is, there are no big departures from the spirit of these Plans. This includes the more generalized objectives that relate to the recommendations of Shoreline Steering Committee. The Shoreline Steering Committee is discussed further in Section 2 and is included in an Appendix of the Plan.

Chapter 8. Future Land Use Plan, 72-85

This Chapter describes each plan district that is shown on the Future Land Use Plan Map. These district names and descriptions have not changed much from the current Plan except where any circumstances have changed and also in relation to the Activity Centers. Some changes have been made to the FLU Map. A Conceptual Road and Trailways Map was included. A new addition is the Zoning Plan that begins on page 80. This is newly required in the Planning Enabling Act. The Zoning Plan helps to clarify what rezonings are appropriate under the Plan.

Chapter 9. Implementation, 86-90

This Chapter is almost all new. This summarizes all of the activities, ordinance changes, and new programs and plans that are called for under the rest of the Plan. The Implementation Chapter is the “to-do list” and is a summary of Chapter 7.

Appendix 1. Opinion Survey Results

Appendix 2. Shoreline Steering Committee Recommendations

Master Plan



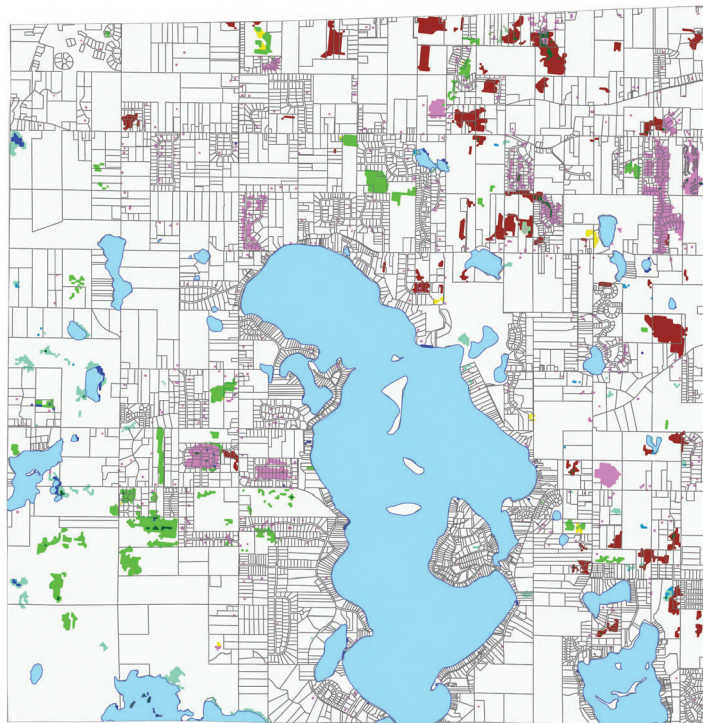
Plan Topic Area Agriculture

ZONING UPDATES

1. Update **Agricultural Conservation Development Option** to better encourage use of this option and preservation of large agricultural tracts for areas zoned Agricultural under development pressure.
2. Update **agribusiness regulations** to, at a minimum, include revision of the 50% rule, standards for farm stays, add potential agribusiness uses, and better define tasting rooms and restaurants.
3. Update regulations to support the development of **agribusiness incubators** such as public and private farm markets, commercial kitchens, and specialized commercial.

DEVELOP NEW OR UPDATE OTHER PROGRAMS/PLANS

1. Coordinate with adjacent communities to develop an **M-72 Agricultural/Agribusiness Corridor** planning effort. This will help to coordinate the allowed uses; it will consider regional impacts on traffic and quality of life; and it will help to promote the region's agricultural industry.
2. Seek partners and funding to develop a public/private **farmer's market**.



Land Cover Change
2001 - 2019

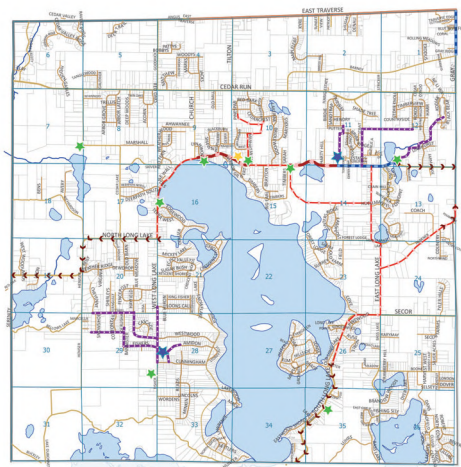
Master Plan



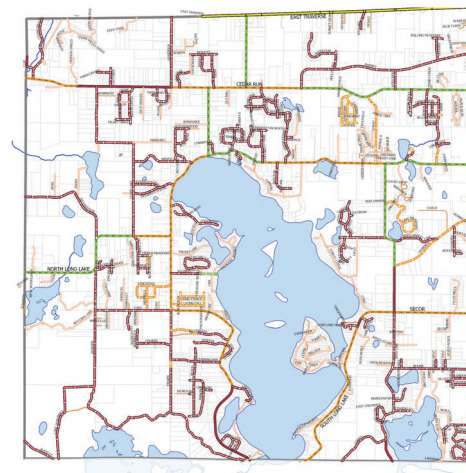
Plan Topic Area Infrastructure

DEVELOP NEW OR UPDATE PROGRAMS/PLANS

1. Develop an **Infrastructure (Utilities/Public Water/Sewer) Plan**, this will become a component of the Master Plan. Infrastructure updates will be targeted for the growth areas identified in this Plan and to protect the fragile environments as identified in the update to the Natural Features Inventory.
2. Develop a separate **Transportation Plan** as a component of the Master Plan, to include
 - a. Corridor Design Plan that addresses the type of road improvements and style/design of roadside treatments that are appropriate for certain special areas.
 - b. An **Access Management Plan** for strategic corridors including North Long Lake Road, Gray Road, and M-72 East Traverse Highway
 - c. Recommendations for providing needed **connections between neighborhoods** in conjunction with new development. These recommendations to be general but also to address key locations where road connections should be sought.
 - d. Recommend when **traffic studies** are required in the evaluation of development proposals, what information should be required, and how the Township can act on the information provided.
3. Develop a **Trailways/Non-Motorized Plan** incorporating a broad range of non-motorized trail connections between neighborhoods, activity/hamlet centers, public lands and facilities, within emerging neighborhoods, and in coordination with other regional trail systems, and with the Shore-to-Shore trail.
 - a. Update regulations to require development of trailways in conjunction with new development as called for in the Trailways Plan.
4. Develop a **Cemetery Plan**
5. Appoint a **Fire Code Plan Reviewer/Inspector** and develop clear point of contact and standards for new development. Create Short Term Rental Safety Regulations/Checklist and implement Inspections of these units by Fire Department personnel.
6. Amend private road ordinance to limit number of units to be served by a private road, update road design standards, and revise administrative process
7. Evaluate the **Time of Transfer Septic Inspection Program** for any needed changes to the standards or the implementation of this program.



Conceptual
Road and Trail Plan



Transportation

Master Plan



Plan Topic Area Natural Features Protections

ZONING UPDATES

1. Create **shoreline buffer protection standards** (primarily in fragile areas identified in the update to the Natural Features Inventory)
2. Devise development standards to incentivize **roadside tree plantings and pollinator gardens**
3. Continue to **prohibit artificial bodies of water**, such as lagoons, canals, basins, and ponds, when near natural bodies of water in Lakefront Residential and Natural Lakefront zones and strengthen ordinance as necessary.
4. Evaluate site plan review and related standards to **better protect identified high quality woodlands and related natural features** for new developments, especially in target areas identified in the update to the Natural Features Inventory.
5. Enhance zoning standards to **promote and encourage conservation development patterns**, especially for target areas identified in the natural Features Inventory.
6. Revise local lighting regulations to **better protect the dark night skies**.
7. Update zoning for **Natural Lakefront District** to be more in line with Lake Residential District while continuing to protect the fragile ecosystems prevalent in this area.

DEVELOP NEW OR UPDATE OTHER PROGRAMS/PLANS

1. Update the **Natural Feature Inventory** and add a **Greenways/Green Infrastructure Plan** to become a component of the Master plan. This plan should include the following:
 - a. Recommendations for a **Tree Replacement/Woodland Protection ordinance** that reasonably and responsibly regulates removal of trees throughout the township on a lot-by-lot basis and especially the lakes district. This should be tied to the areas of greatest importance to the high priority fragile natural systems identified in the Natural Features Inventory.
 - b. **Invasive species action program** parameters
 - c. Recommendation for **specific shoreline buffer standards** in the lake residential areas
 - d. Recommendations for **updates to the Roadside Tree Planting program**
 - e. Outline for **public educational outreach program** including invasive species/native species planting recommendations
 - f. Recommendations for **grading control regulations**, especially targeted for the identified fragile natural areas
 - g. Recommendations for local regulatory framework to **protect wetlands** that are not regulated by the State but are important to maintaining inland lake water quality and supporting identified high priority natural areas.
 - h. Recommendations for **restrictions on the locations and number of impervious surfaces** especially within high priority natural areas and other sensitive environments.
2. Develop a **Storm Water Control/Grading ordinance**
 - a. Specific standards for **storm water controls for new developments** and a process to administer these regulations.
 - b. Specific standards for **individual storm water plans for challenging residential lots**
 - c. Requirements, standards, and process for **grading permits** especially for areas of concern as identified in the update to the Natural Features Inventory.
 - d. **Limitations on impervious surfaces and required storm water controls** for sensitive areas identified in the Natural Features Inventory.
3. Update the Long Lake Township **Watershed Plan**.
4. Create **public education outreach program(s)** and create **incentive programs** to address the following
 - a. **Invasive species education/native plantings recommendations**
 - b. Benefits and means of **protecting natural shorelines**
 - c. **Shoreline naturalization** education and incentive programs/grants/or partnerships
 - d. **Limitations of fertilizing**, especially within areas that can impact sensitive natural features
 - e. **Benefits of limiting impervious surface areas** within these sensitive areas

Master Plan



Plan Topic Area Housing

ZONING UPDATES

1. Better define and regulate single family dwellings as it pertains to **second kitchens and guest suites**
2. Update **multiple family development standards** to require adequate pedestrian facilities, setbacks from parking areas, landscaping, and other design elements to raise the quality of living for residents.
3. Revise standards for **new developments**: lower minimum acreage requirements, add incentives for sidewalks/trails, for deeper setbacks, roadside tree plantings or pollinator gardens.
4. Update ordinance to allow for **guest homes/accessory dwellings/tiny homes** in appropriate locations with rigorous standards to protect the single-family residential character of the Township while expanding housing choice and providing missing middle housing opportunities. Such units not to be available for short term rental use.
5. Allow for **greater densities** in locations where appropriate, especially within the North Village/Activity Center area at the time that appropriate infrastructure (including road capacity and safe intersections) become available to serve the higher densities.
6. Revise regulations to support a **more equitable, sustainable, and affordable housing stock**:
 - a. Preapproved house plans for accessory dwellings;
 - b. Easier and faster development approval for uses by right;
 - c. Removal of regulations that present roadblocks and raise development costs.
7. Promote **varied housing types, sizes, ownership/rental opportunities** to help address the housing crisis in the Township
8. Allow for the **relocation and expansion of the existing mobile home park**; higher density or smaller footprint of homes, or alternative housing types within the North Activity Center area.

DEVELOP NEW OR UPDATE OTHER PROGRAMS/PLANS

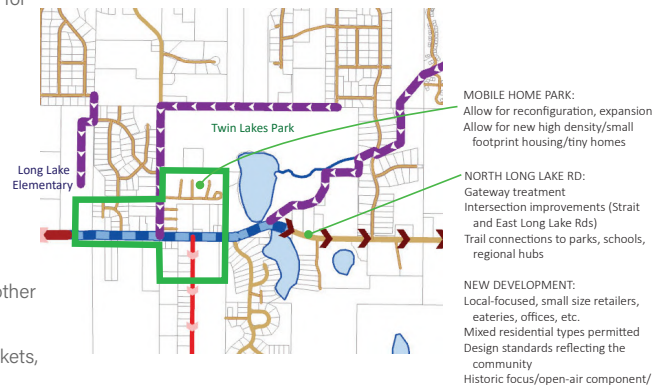
1. Develop **Special Area Plans** for the three Activity Centers, especially the North Activity Center.
2. Continue to evaluate and update the **Short Term Rental Ordinance** and program to reflect changes in the industry, concentrations of rentals that impact the residential character of existing neighborhoods, and possible changes in state law.

Master Plan



Plan Topic Area Activity Centers

1. **Noth Village Center:** Develop a community center in the Strait/North Long Lake/East Long Lake Road corridor characterized by
 - a. **Trailway/multi-modal systems** connecting the uses (residential, schools, commercial, parks) in the area
 - b. **Community-centered and locally-focused businesses, activities, and facilities** - restrict business development to non-chain, appropriately-sized businesses that have amenities or architectural elements that are unique to the Long Lake community.
 - c. A population center connecting a **diversity of housing types**. Allow for the relocation and expansion of the existing mobile home park; higher density or smaller footprint of homes, or alternative housing types. Develop zoning to accommodate these goals.
 - d. Promote **resiliency** with a focus on resource conservation, healthy lifestyles, local food production, and community gathering opportunities in open-air settings.
 - e. Work with partners including property owners and road agencies to provide for **gateway treatments** signifying community center and naturally slowing traffic. Treatments will include landscaping, signage, pedestrian and non-motorized facilities. The area will feature reconfigured and improved intersections.
 - f. The Township will cooperatively work with private and public partners to provide other public amenities within the community center area. This may include a **museum, transit mobility hub, farmers market, and expanded recreational activities**.
 - g. Develop **architectural and site design standards** that will reflect the area's history, its unique character, and that will connect the center's businesses and other facilities in a safe and aesthetic manner for all users.
 - h. Plan for public facilities and private **open-air facilities** such as open-air markets, eating areas, non-motorized connections, and recreational opportunities.
 - i. **Celebrate the rich history of the area** within the community center to possibly include: historic installations at Twin Lakes, a local history museum, interpretive historic trail and trail connections to other area local-focused destinations, such as The Timbers Recreation Area.



2. **Hamlet Center:** Promote the development of a Hamlet, recognizing the historic Linwood settlement area serving as a hub of activity and services to nearby residences in the area of North Long Lake and Church Roads. The purpose of the Hamlet overlay zoning (adopted in 2019) is to:
 - a. Provide for a **small-scale and pedestrian-oriented commercial and residential center** integrated into the existing community;
 - b. Enhance an existing **focal point of activity**;
 - c. Promote **efficient utilization of land and existing buildings and businesses**;
 - d. Take advantage of the **locational attributes Long Lake**;
 - e. **Maintain the existing residential character** of the area;
 - f. Reflect the **residential building vernacular typical of a recreational lake community**;
 - g. Allow for the **reuse of existing residential structures for non-single-family residential uses** within a well-defined set of standards and restrictions (non-waterfront properties only);
 - h. Allow for **economic viability** of the district in part through the expansion of and establishment of new non-residential businesses and activities;
 - i. Protect the **health, safety, and welfare** of the community.

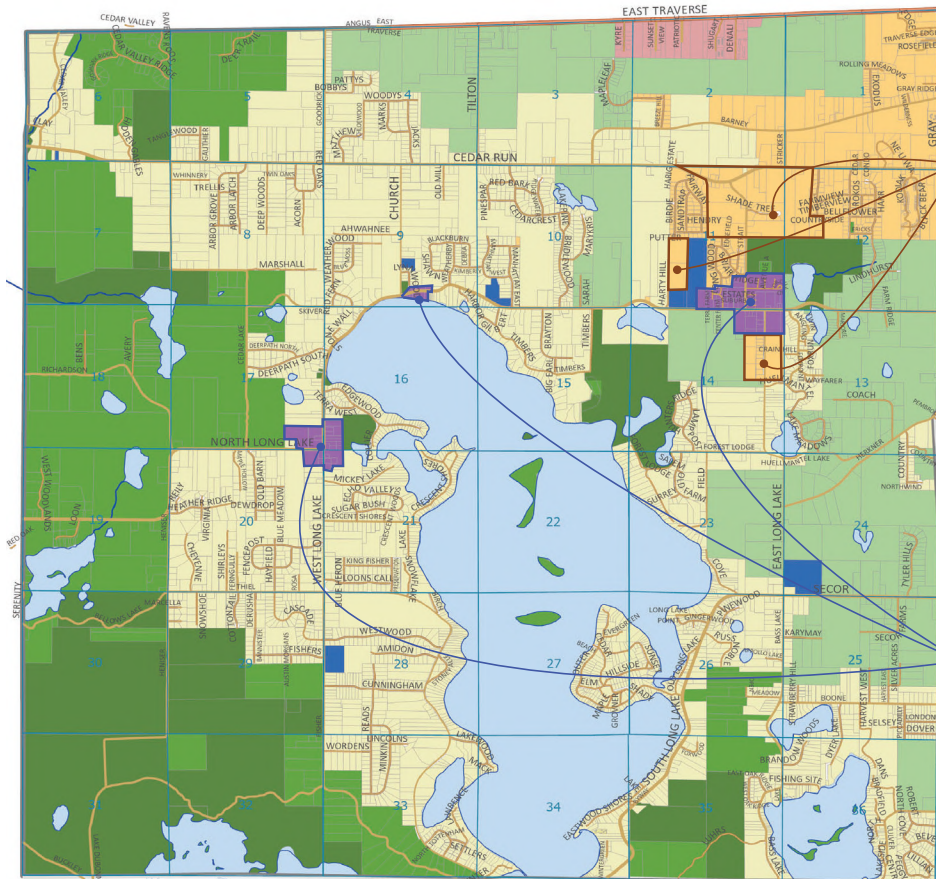


3. **West Activity Area:** Promote the orderly development of a pedestrian-scaled commercial node with limited traffic impact and that will reflect the residential nature of this part of this Township (intersection of North Long Lake/West Long Lake Roads)
 - a. It is anticipated that this Activity Center will develop with commercial uses and services that generate less traffic and activity but will provide logical connections, services, and enhancements to nearby natural areas and existing neighborhoods.
 - b. An auto service station and convenience store are among acceptable uses for this area, provided that the development is small-scale and does not pose a traffic concern as designed.

Master Plan



Future Land Use Guide for Rezoning of Property



Most of the proposed Future Land Use Map at left is consistent with current zoning map. Exceptions include:

1. **Expansion of Moderate Density** planned for areas near services, schools, public spaces, and retail. ***Master Plan text [Zoning Plan] allows rezoning only when and if roads and other infrastructure are in place*** This expansion is planned to accommodate future expected growth while protecting farmland, natural areas, and areas with fragile natural features from growth pressure.
2. Properties zoned **Lake Residential and Natural Lakefront** are not broken out on the FLU Map but Master Plan text [Zoning Plan] recommends keeping these as currently zoned
3. FLU Map distinguishes **Conservation and Recreation** but these two plan districts are both planned to be in the combined Conservation/Recreation zoning district
4. **Activity Centers/Hamlet FLU districts** allows for a mix of commercial and residential zoning designations or for planned mixed use developments per zoning restrictions and requirements



DRAFT Future Land Use



Conservation: Planned for minimum 5 acre lots (1 home per 5 acres). Areas with several seasonal and unpaved roads, near State- or Township-owned parklands. Significant tree cover and recognized Priority Natural Areas.

Agricultural: Planned for minimum 2 acre lots (1 home per 2 acres) or to be in agricultural use. Areas historically or currently farmed and with prime agricultural soils. Agribusinesses also permitted in order to retain large tracts of land in agricultural production.

Low Density Residential: Single family residential and suburban-type development promoted through zoning. Planned for minimum 1 acre lots (1 home per acre). Includes Lake Residential zoning for lakefront properties - also 1 acre minimum.

Moderate Density Residential: Areas planned for 1/2 acre lots or up to 2 homes per acre. Additional density permitted where services are provided. Attached townhouses, duplexes, and other multiple family development patterns are permitted when regulations are met.

Activity Centers/Hamlet: The Plan supports a mix of residential and restricted convenience commercial uses and zoning here. [See detailed board on this topic]

General Business: Light industrial and commercial uses in areas along M-72.

Institutional: The Plan identifies properties used as churches, schools, or government facilities. These uses are expected to remain unchanged and are in a variety of zoning districts.

Recreation: Parks and publicly-owned natural areas, expected to remain.

General Comments: Housing Policies

- #3, #4, and #5, #8 - please change zoning to allow for ADUs for long term use. Tree and pollinator plantings will make best use of developed areas, increase density in particular areas so conservation can be achieved in sensitive areas without too much sacrifice to tax revenue. Allow for more diversity in housing to bring young families to the township and to allow existing 60+ population to age in place if they wish.
- Limit short term rentals in neighborhoods as neighborhoods are losing their character and sense of neighborhood. No longer knowing your neighbors and the hood just becomes a transition into vacation rentals. New developments need to have bigger lot sizes we are losing our up north character and beauty with new pack 'em all in developments. Guest homes accessory buildings, tiny homes, need to exist on bigger lot sizes. Again, we are losing our up north character and beauty with new pack 'em all developments.
- Favorite:
3, 1, 4, 6, 2
Least favorite:
8, 5
- Township needs to have an ordinance on how many STR allowed in a neighborhood and township overall. Also policy on minimum number of day to rental in a neighborhood. Our neighborhood has lost its residential character due to STR as we no longer have the same neighbors, busy roads, and more wear and tear on our private roads. Also, STR on the lake should not be using private boat launches and use public boat launches so their boats are washed before entering our township lakes.
- As a real estate agent in Traverse City, I am seeing a definite need for more available homes to be purchased in Grand Traverse County. It is documented in the August, 2023 TCBN by a recent study conducted by Bowen National Research for Housing North that 7,792 for-sale housing units are required over the next 5 years in Grand Traverse County. We feel the allowance for greater densities is a necessity. Thank you.

General Comments: Natural Features Policies

- Protect water quality, trees, and educate the public on invasive species/native plant benefits.
- In support of all the above. We need to protect the natural shorelines and keep them natural and protect our waters from run off, etc. Protect lake lots from clear cutting to waters' edge. Protect our waters from no phosphorous fertilizing. However, hardware stores and box stores in TC area sell fertilizers containing phosphorous.
- Landscaping and natural buffer between commercial and residential, even if residential is also zoned 'activity center'.
Create natural buffer, trees and landscaping in commercial / activity centers.
If priority 1 wood lots are destroyed, there should be tree planting to try to restore displaced wildlife.
- So logging for \$'s

General Comments: Infrastructure Policies

- Prioritize septic inspection and non-motorized connectivity.
- Twp sooner than later needs a bike path system on North/South Long Lake Road and west long lake road as people are biking, running more than ever and many blind corners and speeding traffic on corners. The path needs to have a buffer between road and trails as windy and people moving here from cities bring their fast city driving here. . North Long Lake Rd and East Long Lake rd are disaster roads for turning during morning and evening work traffic. The lights at the high school have always been funky why not roundabouts or a different design. West Long Lake Road needs to be repaved falling apart in many areas. Fire code Plan yes! Private Road ordinance Yes especially for STR in neighborhoods.
- Trail/ bike path connecting neighborhoods. Sidewalks.
- this would entail eminent domain of residents properties. My taxes going up. And why would residents that own their property agree with non-motorized paths thru their property & neighborhoods.

General Comments: Agriculture Policies

- Farmers market would be a great addition. Yes to zoning regulations that will protect current farmland and allow agribusiness to be profitable and less reliant on crop harvest as climate becomes more erratic.
- Keep as much rural beauty/farm land from being developed into subdivision. We are close enough to towns, TC and Interlochen, Grawn, Lake Ann for restaurants, Our area has enough wineries distilleries. Let's be a township that keeps prides itself on keeping its farm land farm land. Keep the character of Northern MI let's not loose and be another city like ever city out there.
- We Need more agriculture and less subdivisions!
- Why would a township compete with area farmer's markets. That is not what a township should do.
Not that many agriculture in our township. Is this just for Jacob's Farm?
I do not want my tax dollars going towards this

General Comments: Activity Center Policies

- No chain businesses! Keep our dollars local. Prioritize traffic calming measures.
- dont need , dont want
- We centrally located to many gas stations and we have one at Long Lake grocery. Also, there is no need for "community centers." The above sounds like a new age way to create strip malls. When the economy goes bad these type of "community centers" become vacant and eye sores til the economy picks up. We are creating city urban sprawl. Let's keep the rural

character of our township not become like every other city. Grand Traverse County townships are losing its natural beauty to developments and becoming like every other large city. There is way too much traffic issues already at North and East Long Lake, straight roads. Need to address traffic issues first before more development comes. I have nothing against enlarging the mobile home area.

- West activity center : this area is already dangerous and a mess in the morning and evening commute home. A resident there passed away from a drunk driver. That area would get busier and messier without the proper traffic precautions. Adding a dollar general would allow for the disintegration of the northern lake side feel, put long lake grocery at risk of closing, and make this area look disjointed - similar to acme in traverse city. I would like more effort to maintain the character of Long Lake in this area, better walk ability, smaller locally focused businesses. Rather than commercial cheap eyesore.
- Absolutely NOT for these changes or “overlays”
You’re already taxing people out of their homes and now you want to make “community” areas?
We have all the stores we could possibly need!
- You should be ashamed of yourselves wanting to relocate the residents of the trailer park. And also logging clearing land towards twin lakes. A road and path on that side of twin lakes would cost tax payers money. Why would we need a community center. That is what the township hall is.
This will cost taxpayers more money.

Most Favorable Policy Proposals

- Zoning Natural Feature Protections - all
- Housing - Short Term Rental zoning update
- Housing, item 4. Allow guest homes, ADUs, tiny houses
- Agriculture
- Housing
Zoning. 3a
- Infrastructure 3 (trailways plan)
- Agriculture zoning updates 1
- Natural features, 7. Make the natural lake zoning and sport lake zoning more in line with each other.
- Land use

- Zoing. 5a
- Infrastructure 6
- Infrastructure 3 trail ways
- Infrastructure 2 a
- Natural Features Zoning Updates 3
- Infrastructure 5 fire code
- Infrastructure 4 a
- Housing Zoning 1
- future land use all categories
- Activity 1 c
- Natural Features New Plans 2
- As a real estate agent in Traverse City, I am seeing a definite need for more available homes to be purchased in Grand Traverse County. It is documented in the August, 2023 TCBN by a recent study conducted by Bowen National Research for Housing North that 7,792 for-sale housing units are required over the next 5 years. We feel the allowance for greater densities is a necessity. Thank you.
- I believe there is a shortage of housing in this area as a business owner. Many of my employees are having trouble finding affordable housing in. We need to go to higher density to be able to make a fordable housing in Long lake township
- Bike path around Long Lake to connect with TART Trail. (what happened to this? Started years ago. We made donations to Long Lake Township to pay for this. What happened to these funds?
- Pickleball courts – definitely support
- Managing growth – will the Township develop an architectural “look” for new construction so we don’t have a bunch of ugly Dollar stores, etc.?
- Natural Features Protections
- Infrastructure
- Natural Features Protection 1, 3, 4
- Agriculture 1, 2
- Infrastructure 1, 2

- Get intersection of north and East Long Lake Roads
- Zoning Update Natural Features 3 !!!
- Housing 4d
- Most important for the health of our lake is no artificial bodies of water!! Stop all developments of this kind. Concerned about invasive species.
- Activity centers 1 b, e, h
- Natural Features zoning updates – 3
- Farm's market
- Improve roads (Goodrich Road is in horrible shape)
- Open-air activities
- Improve intersection of North LL Road/East LL Road/Strait Road
- Activities planned for residents of all ages (we had this years ago)
- Crosswalk at Taylor Park across N LL Road
- Enhanced pedestrian walkway at Gilbert Park
- Things to add: small branch of the Traverse Area District Library (we were promised this 25 years ago), little free library at township hall, small post office branch or PO service in a local business, or at least a blue mailbox in the township
- I want to lend my support to Goal #6 Water Quality and Lakefront Living – as an appendix to the Mater Plan – with the caveat that it has been thoroughly reviewed and dissected by an environmental attorney expert in this complicated and convoluted field. I want to be assured there are no changes in the wording that would open up and allow for legal loopholes or challenges – especially where Long Lake (and all bodies of water in the township) could be negatively impacted
- Please look into perhaps installing a three way stop at the North Long Lake Rod and East Long Lake Rd intersection. This is a much less invasive and simpler approach to slowing the traffic down and providing safety, than with a costly roundabout.

Least Favorable Policy Proposals

- Activity Centers 1
- Dollar general
- HAMLET CENTER

- Moving trailer park residents
- Activity Centers 3
- Activity Centers 2
- And whatever other name you gave to the last “center”
- WEST center
- Housing Zoning 8
- Guide for rezoning property – no expansion
- Relocating the residents of the mobile home park (taking away scarce affordable housing)
- Connecting subdivision, if it would increase traffic through neighborhoods
- Adding a walking trail from Rokos Ct (concerns about children walking down to the lake alone – risk of drowning)
- In terms of density, I cannot stress enough that the rural nature of our township needs careful preservation. All living in the township are not far from all the amenities needed to exist in an environmentally conscious, healthy and safe environment. More buildings, stores, homes, apartments, etc., lead to more traffic (which is already a problem in the township), less environmental consciousness and lack of safety.

Process for Master Plan Approval

1. Planning Commission prepares draft of the Master Plan (*complete*)
 - Based on public input received as a result of the July 20th Open House, there are no major changes to the draft recommended by staff. Following the public input period, distribution of the Plan draft, and public hearing, some minor refinements and changes should be considered.
2. Planning Commission submits the Master Plan draft to the Township board for review and comment and approval of distribution of the Plan (*expected at August 22nd PC meeting*)
3. Township Board approves distribution of the Plan to all entities required under the Planning Enabling Act. (*expected at September 12th Board meeting*)
4. Draft distributed (*completed by September 15th*)
5. Comment period (*63 days from date of distribution – September 15th through November 17th*)
6. Public Hearing Notice -15 days before the hearing (*November 12th*)
7. Public hearing, (no sooner than 63 days after the distribution of the plan draft) (*November 28th*)
 - Planning Commission reviews any final changes to the draft based on input during public hearing and during the comment period.
8. Planning Commission approval and recommendation of approval to Township Board (*December 19th*)
9. Township Board adopts Master Plan by resolution (*expected January 9, 2024*)

Staff Recommendation

If the Planning Commission is satisfied with the Master Plan Draft as presented, it is recommended that it approves a motion to “submit the Master Plan draft to the Township Board for review and approval of distribution of the draft for comment”.

July 6, 2023

Leslie Sickterman
Planner
Long Lake Township
8870 North Long Lake Rd
Traverse City, Michigan 49685

**RE: Request for Site Plan Review
New retail business**

Dear Leslie:

A new retail business is being planned for the northwest corner of the intersection of North Long Lake Road and West Long Lake Road. The proposed business is a Dollar General and is a use by right in the General Business zoning district. Data concerning the store operation are listed on the cover sheet of the plan set.

The proposed store will be 7,457 square feet which is under the threshold for requiring a conditional use permit and therefore this application is for Site Plan Review. It is the intent of this submittal to meet the ordinance requirements as a use by right.

The parent parcel belongs to Addison and Bonnie Wheelock and the developer has an option with them to purchase the southern 3 acres which will require a land division application. It is our intent to submit this application in the coming weeks.

The property adjacent to our property lines are both zoned general business. Across the road to our east is zoned local business and the properties across the road to our south are zoned low density residential.

There will be two points of access to the site. We have been working with the road commission for permitting. We have preliminary approval but have since made application for permits on the entrances. We anticipate receiving the permits in the next week or so.

We have made applications to the health department for well and septic. We expect these permits to be issued in the coming weeks. The same goes for Soil Erosion Control.

All stormwater will be managed via two retention/infiltration basins. Of note is that the road commission has conducted various improvements over this property to manage runoff from the county roads. Our design does not interfere with their efforts and the various spillways and ditching that is occurring over the subject property will be left unimpacted except for the new culvert under our south entrance. I will work with your township engineer for the stormwater review.

The site slopes from the north to the south. A cut grade along the north side is proposed along with a fill grade towards the south to provide the area needed for the building and parking. You will note that we are moving dirt across the proposed property line near our east entrance. The parent parcel owner/seller will provide us permission to conduct this earthwork as part of the sale agreement. Because of the grading, we are proposing a curb around

much of the parking lot to the east side of the store. This will manage our stormwater as well as provide a positive stop for vehicles. We are working with Cherryland Electric to evaluate the vertical clearances to the utility line that runs north and south near the front of the proposed store.

The required parking is 25 spaces based on 1 space per 300 sf of usable area. Per the definition, we have no area attributed to places like mechanical rooms and so forth that would reduce the calculated floor area. We are proposing 29 spaces which is in line with the ordinance which allows up to 20% more parking than the minimum.

The dumpster and loading areas are shown behind or to the side of the building. The dumpster is enclosed. Two areas are identified in order to meet the loading space requirements.

The building plans are included in our submittal. A mechanical area lying outside of the building footprint is located on the west side of the building and enclosed with fence from view. The building is shown to be a pitched, shingled roof.

Lighting is mostly building mounted with only 1 pole mounted light shown. A lighting photometric plan is attached to the plan set.

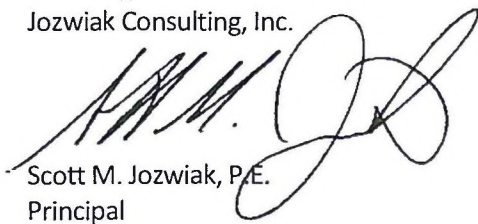
Landscaping does not appear to be relevant to this project since we don't abut residential on our property lines. We intend to fully comply with the ordinance on this matter but during our review, it didn't appear that anything was required. All slopes will be covered with mulch blanket and seeded following construction. The steeper slopes will be planted with wildflower mix.

The proposed project is not in any of the listed Natural Features Inventory maps.

In summary, our intent is to comply with the ordinance as a use by right in the general business zoning district and meeting all relevant sections of the ordinance. If during your review you identify something that we have overlooked or if you require additional information, by all means, contact me and we will work through it. We look forward to being on your August Planning Commission meeting and it is our intent to have permits from Grand Traverse County in time for that meeting.

We look forward to presenting our project at your next Zoning Board of Appeals meeting. If you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,
Jozwiak Consulting, Inc.

A handwritten signature in black ink, appearing to read 'S.M. Jozwiak', with a large, stylized flourish at the end.

Scott M. Jozwiak, P.E.
Principal

SITE PLAN REVIEW / CONDITIONAL LAND USE APPLICATION

OFFICIAL USE ONLY	Date Received <div style="text-align: right; font-size: 1.2em;">7-7-22</div>	
Project Title: <div style="font-size: 1.2em;">Dollar General</div>	Received by <div style="text-align: right; font-size: 1.2em;">[Signature]</div>	
Case No. <div style="font-size: 1.2em;">CPR 08-23-07</div>	Fee Amount <div style="text-align: right; font-size: 1.2em;">\$450</div>	Fee Received <div style="text-align: right; font-size: 1.2em;">\$450</div>

SUBMIT TO:

**LONG LAKE TOWNSHIP
PLANNING AND ZONING DEPARTMENT
8870 NORTH LONG LAKE ROAD
TRAVERSE CITY, MI 49684
PHONE # 231 946-2249 FAX 231 946-4573**

You MUST answer all questions and include all attachments as required by the Long Lake Township Zoning Ordinance #109, as amended, or the application will be considered incomplete. Submittal of application is required 45 days prior to the regular meeting date of the Long Lake Township Planning Commission

A. Applicant & Owner Information			
Owner(s): attach list of all principals/officers if owner is not an individual Addison and Bonny Wheelock Trusts		Applicant (if different): attach list of all principals/officers if applicant is not an individual Midwest V, LLC	
Owner's Address: 9954 N. Long Lake Rd		Applicant's Address: 1435 Fulton St, 2nd Floor	
City: Traverse City	State: MI	Zip: 49685	City: State: Zip: Grand Haven MI 49417
Phone Number Fax Number		Phone Number Fax Number (616) 842-2030	
Email Address		Email Address pete@westwind.build	
B. Property & Plan Preparer Information			
Property ID: 28-08- 017 - 016 - 02 28-08- - - 28-08- - - 28-08- - -		Property Address: 9954 N. Long Lake Road	
		Proof of ownership (copy(s) attached): <i>select one from pull down list & provide copy of proof</i> <u> X </u> Deed	
Name & Address of professional (engineer, land surveyor, landscape architect) licensed in Michigan who prepared the plan:			
Name: Scott Jozwiak		Firm: Jozwiak Consulting	
Address: 13300 S. West Bayshore Drive		Phone: Fax Number: (231) 218-1201	
City: Traverse City	State: MI	Zip: 49684	Email Address Scott@jozwiakconsulting.com

SITE PLAN REVIEW / CONDITIONAL LAND USE APPLICATION

C. Project Information

Type of use (check all that apply):

- | | | |
|---|--|--|
| <input checked="" type="checkbox"/> Commercial | <input type="checkbox"/> Industrial | <input type="checkbox"/> Single Family Residential Development |
| <input type="checkbox"/> Office(s) | <input type="checkbox"/> Multiple Family Development | <input type="checkbox"/> Utility |
| <input checked="" type="checkbox"/> Commercial/Retail | <input type="checkbox"/> Condominium | <input type="checkbox"/> Other |

Project Description: New 7457 sf retail building and related parking. Project includes land dividing the parcel to create this 3 acre parcel. Parent parcel address is 9954 N. Long Lake Road.

Section 24.5 lists the standards for approval of a site plan. Explain below or on an attached sheet how the project meets all standards.

- ☒ **Arrangement of Structure.** Site Plans shall demonstrate that buildings, parking areas, signs, walls, fences, and the like are designed to minimize adverse affects on development users and the occupants of adjacent properties.
Proposed structure exceeds minimum setbacks.
- ☒ **Natural Features.** Site Plans shall demonstrate that as many natural features as possible have been retained, particularly where such features provide a buffer between adjoining properties or assist in preserving the general appearance of the neighborhood or help control soil erosion or stormwater.
This location has topography warranting tree clearing to allow the site to "bench" in. We are working to incorporate and preserve road commissions drainage improvements that were made at the intersection. All slopes will have mulch blanket installed.
- ☒ **Vehicular and Pedestrian Traffic.** Site Plans shall fully conform to the driveway and traffic standards of the Michigan Department of Transportation and the Grand Traverse County Road Commission. Further, the Site Plan shall demonstrate that there is proper relationship between existing and proposed roadways, parking areas, and that the safety and convenience of pedestrian and vehicular traffic has been assured. Manufactured housing communities, multifamily developments, shopping centers and/or office parks are not exempt from providing interior roads for vehicular and pedestrian access to abutting properties.
Internal parking circulation exists with the proposed plan. Entrances to the county road are located at our east and south property lines. Permit for entrances has been applied for.
- ☒ **Public Safety.** Site Plans shall fully conform to the applicable fire safety and emergency vehicle access requirements of the Grand Traverse County Construction Code.
Construction plans will be submitted for review by the construction code office.
- ☒ **Drainage.** Site Plans shall fully conform to the Grand Traverse County Drain Commission standards.
It is the intent to meet/exceed the requirements for stormwater management.
- ☒ **Erosion.** Site Plans shall fully conform to the Grand Traverse County Soil Erosion and Sedimentation Control Ordinance.
It is the intent to meet/exceed the requirements of the SESC ordinance.
- ☒ **Hazardous Waste Management.** Site Plans shall demonstrate that reasonable precautions will be taken to prevent hazardous materials from entering the environment.
Project does not contain products meeting hazardous waste criteria.
- ☒ **Public Health.** Site Plans shall fully conform to the requirements of the Michigan Department of Public Health and the Grand Traverse County Health Department.
Permits are applied for both well and septic
- ☒ **Statutory Compliance.** Site Plans shall fully conform to all applicable state and federal statutes.
It is the intent to meet/exceed the requirements of other state and federal statutes.
- ☒ **Conformance with Township Master Plan.** Site Plans shall fully conform to the land use policies, goals and objectives of the Long Lake Township Master Plan.
The parcel is shown to be commercial in both the current zoning and the master plan.

SITE PLAN REVIEW / CONDITIONAL LAND USE APPLICATION

D. Conditional Land Uses

Is the proposed use a conditional land use?

- ☐ Yes → *complete the rest of Section D*
☒ No → *skip to Section E*

Are there use specific standards under Article 19 that apply to the use proposed?

- ☐ Yes, Section 19. → *explain how the standards are met on attached sheet*

Section 19.1.3 requires the Planning Commission to find that the following general standards are met to approve any conditional use. Explain how the proposal meets these standards (*add additional sheets if necessary*)

- ☐ Will be harmonious with and in accordance with the goals, objectives and policies of the Township Master Plan.
- ☐ Will be designed, constructed, operated and maintained in harmony with the existing or intended character of the general vicinity and that such a use will not change the essential character of the area in which it is proposed.
- ☐ Will not be hazardous or disturbing to existing or future uses in the same general vicinity and in the community as a whole.
- ☐ Will be served adequately by essential public facilities and services, such as highways, streets, police and fire protection, stormwater drainage, refuse disposal, water and sewage facilities and schools or persons or agencies responsible for the establishment of the proposed use shall be able to provide adequately for such services.
- ☐ Will not create excessive additional requirements at public cost for facilities and services and will not be detrimental to the economic welfare of the community.
- ☐ Will not involve uses, activities, processes, materials and equipment or conditions of operation that will be detrimental to any person, property or general welfare by reason of excessive production of traffic, noise, vibration, smoke, fumes, glare or odors.
- ☐ Will ensure that the environment shall be preserved in its natural state, insofar as practicable, by minimizing tree and soil removal, and by topographic modifications that result in maximum harmony with adjacent areas.

E. Required Submittals

Engineered Site Plan - all of the following are required

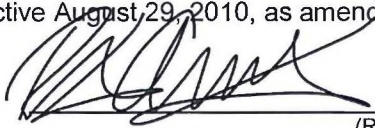
- ☒ Digital version (.pdf) of each page of plan set
☒ 1 copy attached of full size site plan set
☒ 3 copies attached of 11" x 17" size plan set

- ☒ Signed Escrow Agreement Attached

F. Required Signatures

I agree the statements made above are true, and if found not to be true, this application and any approval will be void. Further, I agree to comply with the conditions and regulations provided by the Long Lake Township Zoning Ordinance #109, effective August 29, 2010, as amended.

Owner's
Signature:



(Required)

Date:

7-6-23

Applicant's
Signature:

(If Applicable)

Date:

NOTE: By signing this application, the property owner agrees to on-site inspections by Long Lake Township Zoning, Planning, or Assessing officials, necessary to ascertain compliance, completion and value of the content of the application.

Escrow Policy Acknowledgement

I have read, and agree to abide by, the Long Lake Township policy concerning escrow fees.

Name (please print) Pete Oleszczuk

7-6-23

Representing Midwest V, LLC

Signed  Date _____

Project Name Retail Business, Long Lake

Person/Company responsible for account (billing purposes):

Name Midwest V, LLC

Mailing Address/PO Box 1435 Fulton St, Second Floor

City Grand Haven State MI Zip 49417

Phone Number: 616-842-2030 Fax Number _____

e-mail address pete@westwind.build

*****ALL ESCROW DEPOSITS MUST BE CURRENT OR PROJECT WILL BE
REMOVED FROM AGENDA OR TABLED,
AND NO ACTION WILL BE TAKEN**

GENERAL SITE NOTES
ALL CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE CURRENT APPLICABLE LOCAL, COUNTY, STATE OR FEDERAL SPECIFICATIONS AND DETAILS.

THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS AND REGULATIONS GOVERNING THE FURNISHING AND USE OF SAFEGUARDS, SAFETY DEVICES AND PROTECTION EQUIPMENT. THE CONTRACTOR SHALL TAKE ANY NECESSARY PRECAUTIONS TO PROTECT THE LIFE AND HEALTH OF EMPLOYEES AND THE PUBLIC IN THE PERFORMANCE OF THE WORK.

ANY CHANGES IN PLANS OR SPECIFICATIONS MUST BE REVIEWED BY THE PROJECT ENGINEER, ARCHITECT AND/OR THE OWNER.

THE LOCATIONS OF UNDERGROUND UTILITIES AND STRUCTURES, AS SHOWN ON THE DRAWINGS, ARE APPROXIMATE AND MAY BE INCOMPLETE. LOCATIONS ARE BASED ON PREVIOUS CONSTRUCTION PLANS, DATED AS-BUILT AND UTILITY FLAGGING AS DISCOVERED IN THE FIELD. NO GUARANTEE IS MADE THAT ALL UTILITIES AND STRUCTURES ARE SHOWN.

REFER TO ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.

SOIL EROSION CONTROL
SOIL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO THE COMMENCEMENT OF ANY EARTHWORK.

THE SOIL EROSION CONTROL MEASURES SHOWN ARE THE MINIMUM CONTROLS TO BE USED ON THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY AND PERMANENT SOIL EROSION CONTROL MEASURES TO PROTECT THE DISTURBED AREAS AND ADJACENT PROPERTIES FROM ACCELERATED EROSION AND SEDIMENTATION RESULTING FROM PROJECT CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.

SHOULD ADDITIONAL SOIL EROSION CONTROL MEASURES BE DETERMINED NECESSARY, THEY SHALL BE PLACED NO LATER THAN 24 HOURS FROM THE TIME OF NOTIFICATION TO THE GENERAL CONTRACTOR. IF NOT INSTALLED AT THE TIME OF SITE CONSTRUCTION WILL BE HALTED UNTIL SUCH MEASURES HAVE BEEN INSTALLED AND APPROVED.

ALL DISTURBED AREAS SHALL BE TOPSOILED WITH A MINIMUM OF 4" OF TOPSOIL, SEEDED AND MULCHED.

THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING GROUND COVER ON AREAS DISTURBED BY CONSTRUCTION AND SHALL REPAIR ALL WASHOUTS AND EROSION DURING THE GUARANTEE PERIOD OF ONE (1) YEAR AFTER GROUND COVER IS ESTABLISHED, AT NO ADDITIONAL COST TO THE OWNER.

ALL SEDIMENT DROPPED OR ERODED ONTO PUBLIC RIGHT-OF-WAY OR PRIVATE ROADS SHALL BE REMOVED AT THE END OF EACH WORKING DAY.

ALL EROSION/SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED IN WORKING ORDER AT ALL TIMES.

ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE IS STABILIZED.

DEMOLITION
ALL DEMOLITION SHALL BE IN ACCORDANCE WITH STATE AND FEDERAL CODES.

SPECIAL CARE SHALL BE TAKEN IN EXCAVATING IN THE PROXIMITY OF ALL UTILITIES. THE CONTRACTOR SHALL SECURE ASSISTANCE FROM THE APPROPRIATE UTILITY COMPANY IN LOCATING ITS LINES. THE CONTRACTOR SHALL ALSO PROVIDE SUPPORT FOR ANY UTILITY WITHIN THE EXCAVATION, PROVIDE PROPER COMPACTION UNDER ANY UNDERMINED UTILITY STRUCTURE AND, IF NECESSARY, INSTALL TEMPORARY SHEETING OR USE A TRENCH BOX TO MINIMIZE THE EXCAVATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL UTILITIES, WHETHER PRIVATELY OR PUBLICLY OWNED ABOVE OR BELOW GROUND SURFACE, WHICH MAY BE ENCOUNTERED DURING CONSTRUCTION.

UTILITY LEAD WORK SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANIES BY THE CONTRACTOR. WHERE UTILITIES ARE TO BE REINSTALLED OR RELOCATED, COORDINATE THESE ACTIVITIES WITH DEMOLITION WORK.

ALL DEMOLITION MATERIAL SHALL BE REMOVED FROM THE PROPERTY AND DISPOSED OF IN A LEGALLY DESIGNATED DISPOSAL AREA. NO ON-SITE BURNING WILL BE PERMITTED. PERMITS AND FEES FOR DISPOSAL OF DEMOLITION MATERIAL SHALL BE OBTAINED AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

EXCAVATED AREAS, HOLES, OPEN BASEMENTS, AND OTHER HAZARDOUS OPENINGS SHALL BE FILLED WITH CLEAN GRANULAR MATERIAL MEETING MUD CLASS II REQUIREMENTS. BACKFILL SHALL BE PLACED IN 8"-10" LIFTS LOOSE MEASURE AND COMPACTED TO 95% MAX. DRY DENSITY AS DETERMINED BY MODIFIED PROCTOR (ASTM D 1557).

AT THE COMPLETION OF THE DEMOLITION OPERATIONS, THE ENTIRE WORK AREA SHALL BE LEFT IN A LEVEL, GRASS FREE, FREE OF ANY PROTECTIVE DEVICES AND BARRIERS REMOVED. ALL EXPOSED AREAS SHALL BE SUITABLY TOPSOILED, SEEDED AND MULCHED. ALL REPLACED OR REPAIRED ITEMS TO BE DONE TO EQUAL OR BETTER CONDITIONS.

SITE REMEDIATION
REFER TO SOILS REPORT FOR ALL SITE WORK AND BUILDING FOUNDATION PREPARATION.

EARTHWORK
CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING ANY EARTHWORK CALCULATIONS NECESSARY. ENGINEER WILL WORK WITH THE CONTRACTOR TO AMEND GRADES AS DEEMED NECESSARY, WHERE POSSIBLE.

EXCESS TOPSOIL SHALL BE REMOVED FROM SITE.

ALL FILLED AREAS SHALL BE COMPACTED AND MOISTURE CONTROLLED. ALL BASE MATERIAL SHALL BE COMPACTED TO 95% OF ITS MAXIMUM UNIT WEIGHT.

PARKING LOT GRADING IN BARRIER FREE AREAS SHALL NOT EXCEED 2% IN ANY DIRECTION. ALL BARRIER FREE ROUTES SHALL EXCEED A 2% CROSS SLOPE AND 5.0% GRADE ALONG THE ROUTE UNLESS A CURB RAMP IS INDICATED.

CONTRACTOR SHALL REFER TO BUILDING PLANS FOR FOUNDATION EXCAVATION.

GRAVEL PLACEMENT MUST COMPLY WITH THE CURRENT MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

GRADES AROUND THE BUILDING PAD SHALL BE SLOPED AWAY FROM THE STRUCTURE.

SANITARY SEWER SERVICE
A NEW SEPTIC SYSTEM IS PROPOSED.

WATER SERVICE
A NEW TYPE II WATER WELL IS PROPOSED FOR DOMESTIC WATER SUPPLY

CONCRETE FLAT WORK
ALL CONCRETE SHALL BE A MINIMUM OF 4,000 PSI OR AS PRESCRIBED IN THE ARCHITECTURAL PLANS.

SITE LIGHTING
LIGHTING IS PROPOSED IN THIS PACKAGE AND TO BE INSTALLED BY ELECTRICAL CONTRACTOR.

BUILDING MOUNTED LIGHTING SHALL BE IN ACCORDANCE WITH THE TOWNSHIP LIGHTING ORDINANCE AND REVIEWED BY ZONING ADMINISTRATOR PRIOR TO INSTALLATION.

LIGHTING CONTRACTOR SHALL SECURE APPROVAL FROM MUNICIPALITY PRIOR TO SELECTING AND INSTALLING LIGHT FIXTURES.

ALL SITE LIGHTING SHALL BE DARK SKY TYPE AND LIGHT RAYS CUT OFF AT THE PROPERTY LINES AND MEET ALL PRESCRIBED REQUIREMENTS OF THE ORDINANCE.

THIS SUBMITTAL DOES NOT INCLUDE INFORMATION ON LOCATION OR TYPE OF SIGNAGE FOR THIS FACILITY. SIGNAGE WILL BE ADDRESSED SEPARATELY AT A LATER DATE, ALONG WITH APPLICATION FOR SECURING PROPER PERMITS FROM THE TOWNSHIP.

SIGNAGE

THE BUSINESS WILL REQUIRE 4 EMPLOYEES PER DAY (2 SHIFTS OF 2). THE RETAIL STORE WILL SELL GENERAL MERCHANDISE INCLUDING HEALTH, PERSONAL CARE, BEAUTY, FOOD, HOUSEHOLD, PET, BABY, APPAREL, TOYS, ETC.

USE STATEMENT

RETAIL BUSINESS WILL NOT USE, STORE OR
GENERATE HAZARDOUS SUBSTANCES OR POLLUTING
MATERIALS

HAZARDOUS SUBSTANCES

UPON RECEIPT OF PERMITS, PROJECT WILL TAKE
APPROXIMATELY 7 MONTHS TO COMPLETE.

PROJECT SCHEDULE

PROJECT WILL BE COMPLETED IN ONE PHASE

PROJECT PHASING

BAM TO 10PM, 7 DAYS A WEEK.
SCHEDULE MAY BE ALTERED

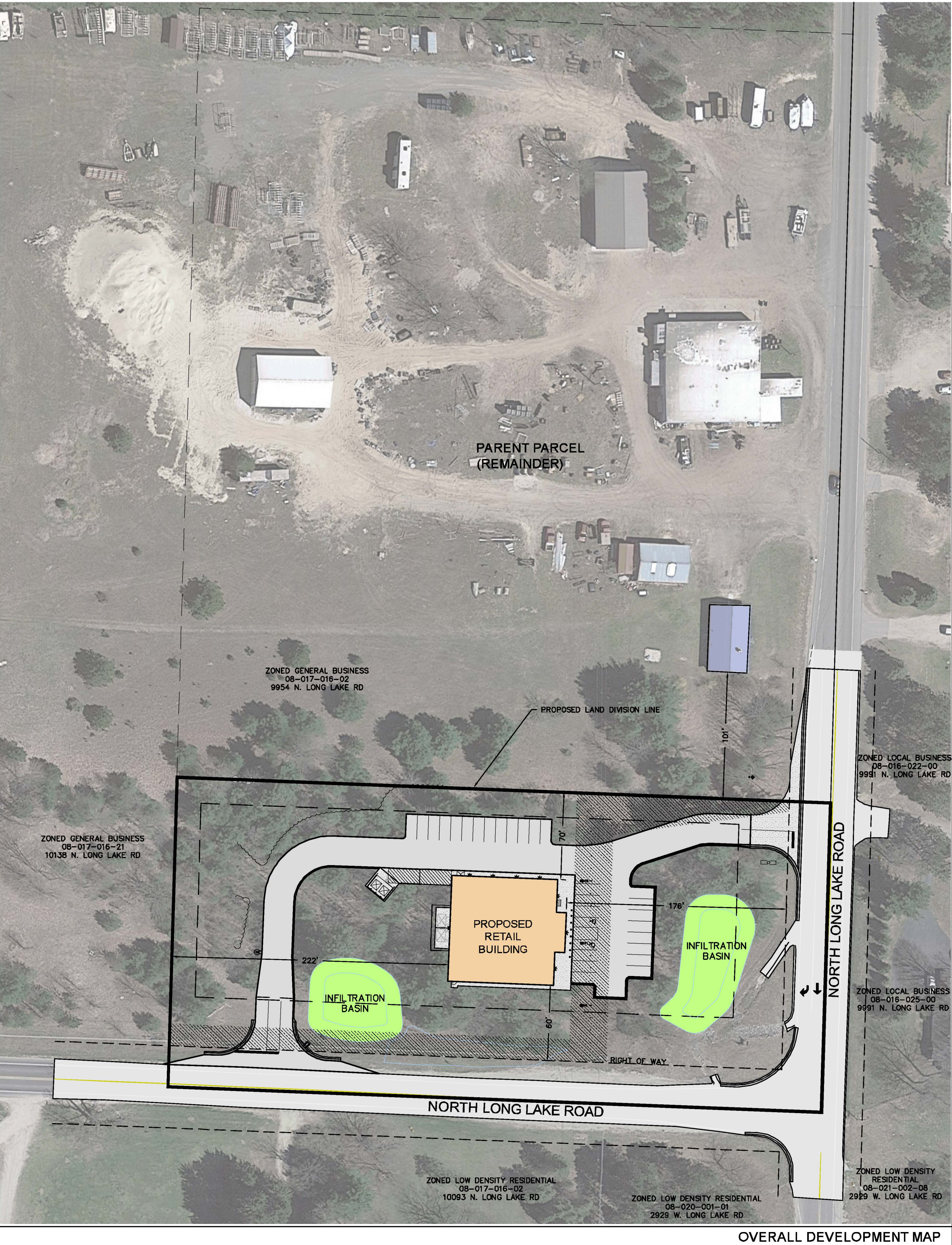
HOURS OF OPERATION

AN ICE MERCHANDISER MAY BE POSITIONED NEAR
THE ENTRANCE
LOCATION SHOWN ON SHEET C1.2 IS APPROXIMATE

OUTDOOR SALES

THIS PARCEL IS NOT INCLUDED IN ANY OF THE
NATURAL FEATURES INVENTORY MAPS.

NATURAL FEATURES STATEMENT



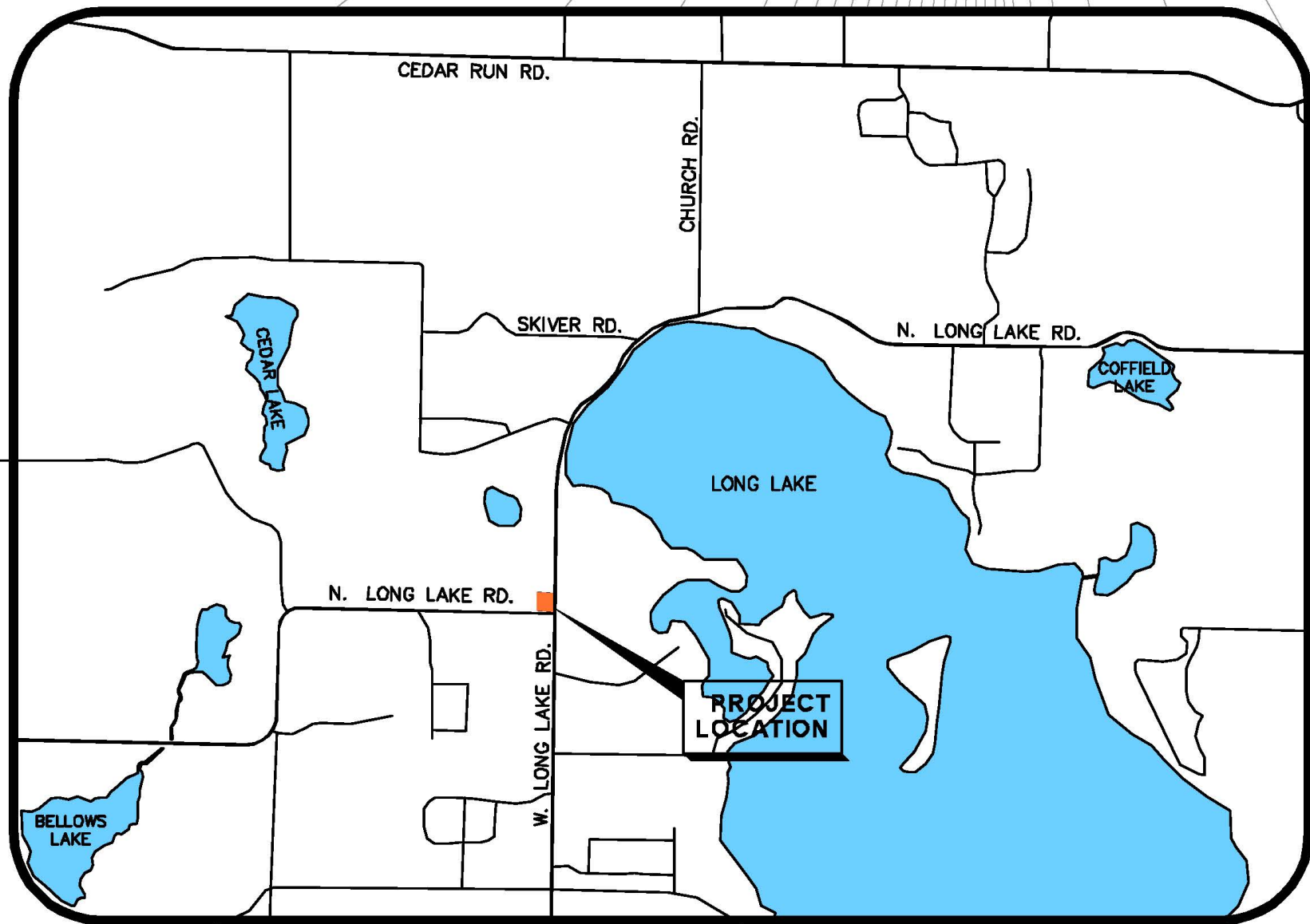
LAND USE
LONG LAKE TOWNSHIP

RIGHT-OF-WAY PERMIT
GRAND TRAVERSE COUNTY ROAD
COMMISSION

WELL AND SEPTIC
GRAND TRAVERSE COUNTY DEPT. OF
ENVIRONMENTAL HEALTH

SOIL EROSION CONTROL
GRAND TRAVERSE COUNTY SOIL EROSION

PERMITS REQUIRED



PROJECT LOCATION MAP

PART OF THE SOUTHEAST 1/4 OF SECTION 17, TOWN 27 NORTH, RANGE 12 WEST, LONG LAKE TOWNSHIP, GRAND TRAVERSE COUNTY, MICHIGAN, DESCRIBED AS: BEGINNING AT THE SOUTHEAST CORNER OF SAID SECTION; THENCE NORTH 87°46'39" WEST ALONG THE SOUTH LINE OF SECTION 17 AND THE CENTERLINE OF NORTH LONG LAKE ROAD (66' WIDE PUBLIC) A DISTANCE OF 525.66 FEET; THENCE NORTH 10°40'24" EAST A DISTANCE OF 248.61 FEET; THENCE S 89°40'24" WEST ALONG THE CENTERLINE OF SAID ROAD TO THE EAST LINE OF SAID SECTION AND THE CENTERLINE OF SAID NORTH LONG LAKE ROAD; THENCE SOUTH 10°39'37" WEST ALONG SAID LINE A DISTANCE OF 248.61 FEET TO THE POINT OF BEGINNING. CONTAINING 130,671 SQUARE FEET OR 3.000 ACRES.

PARCEL DESCRIPTION

APPLICANT / OWNER:
MIDWEST V, LLC
1435 FULTON ST., 2ND FLOOR
GRAND HAVEN, MI 49417
CONTACT: PETER OLESZCZUK
PHONE: (616) 842-2030

SITE INFORMATION:
9954 NORTH LONG LAKE RD.
TRAVERSE CITY, MI 49684

PARCEL IDS:
part of 28-08-017-016-02

USE
ZONING: GENERAL BUSINESS

WHEELOCK AND SONS WELDING)
PROPOSED USE: RETAIL BUSINESS

SETBACKS REQUIRED:
FRONT: 40 FT
SIDE: 20 FT
REAR: 20 FT

SITE INFORMATION

TOTAL BUILDING AREA = 7,457 SF
RETAIL SALES AREA = 7,457 SF (UFA)
PARKING RATIO=1 PER 300 SF USABLE FLOOR AREA
PARKING REQUIRED
7,457/300=24.9 (25 SPACES REQUIRED)
SPACES PROVIDED = 29
(INCLUDES 2 A.D.A. ACCESSIBLE SPACES)

PARKING INFORMATION

PROPOSED PARCEL SIZE = 130,671 SF (3.00 AC.)
 PROPOSED PARCEL NET (W/O ROW) = 106,271 SF (2.44 AC.)
 PROPOSED BUILDING = 7,481 SF
 BUILDING LOT COVERAGE = 7.04%
 PROPOSED IMPERVIOUS = 32,458 SF
 (BUILDING, ASPHALT AND CONCRETE)
 IMPERVIOUS LOT COVERAGE = 31%

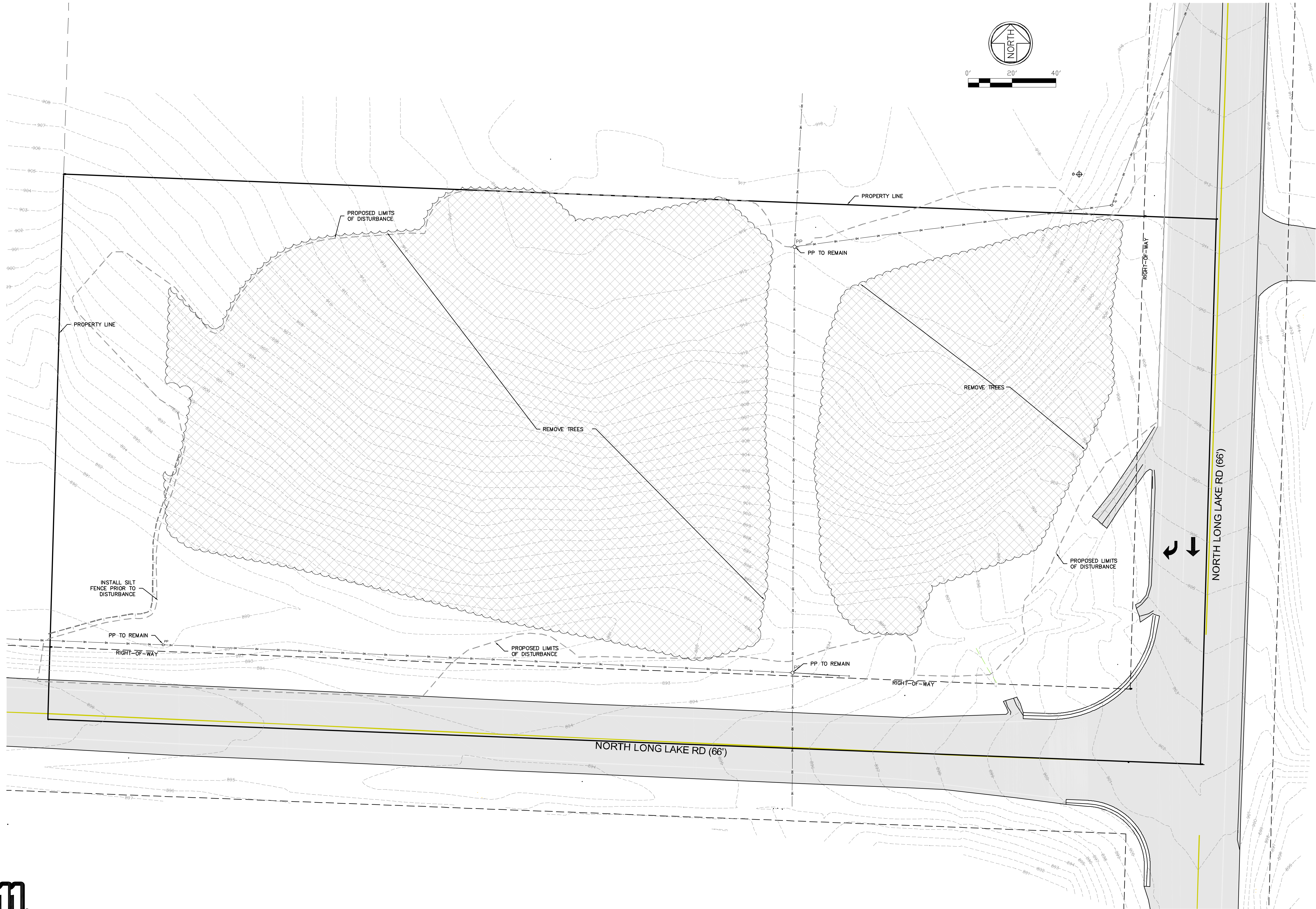
LOT COVERAGE

C1.0	GENERAL INFORMATION
C1.1	EXISTING CONDITIONS/DEMOLITION PLAN
C1.2	SITE AND UTILITY PLAN
C1.3	GRADING PLAN
C1.4	SESC PLAN
C5.1	DETAIL SHEET
C5.2	SEPTIC DETAIL SHEET
C5.3	ENTRANCE DETAIL
C5.4	STORMWATER MANAGEMENT AND DETAILS
L1.0	LIGHTING PLAN W/ PHOTOMETRICS

SHEET INDEX



Know what's below.
Call before you dig.



PROJECT

RETAIL BUSINESS
LONG LAKE TOWNSHIP

CLIENT

MIDWEST V. LLC
1435 FULTON ST., 2ND FLOOR
GRAND HAVEN, MI 49417

PROJECT NO.:

2023-104

EXISTING
CONDITIONS/
DEMOLITION
PLAN

PLAN DATE:

7-6-2023

PERMIT SUBMITTALS

ROAD COMMISSION REVIEW

7-25-2023

STORMWATER MANAGEMENT PLAN UPDATES

8-14-2023

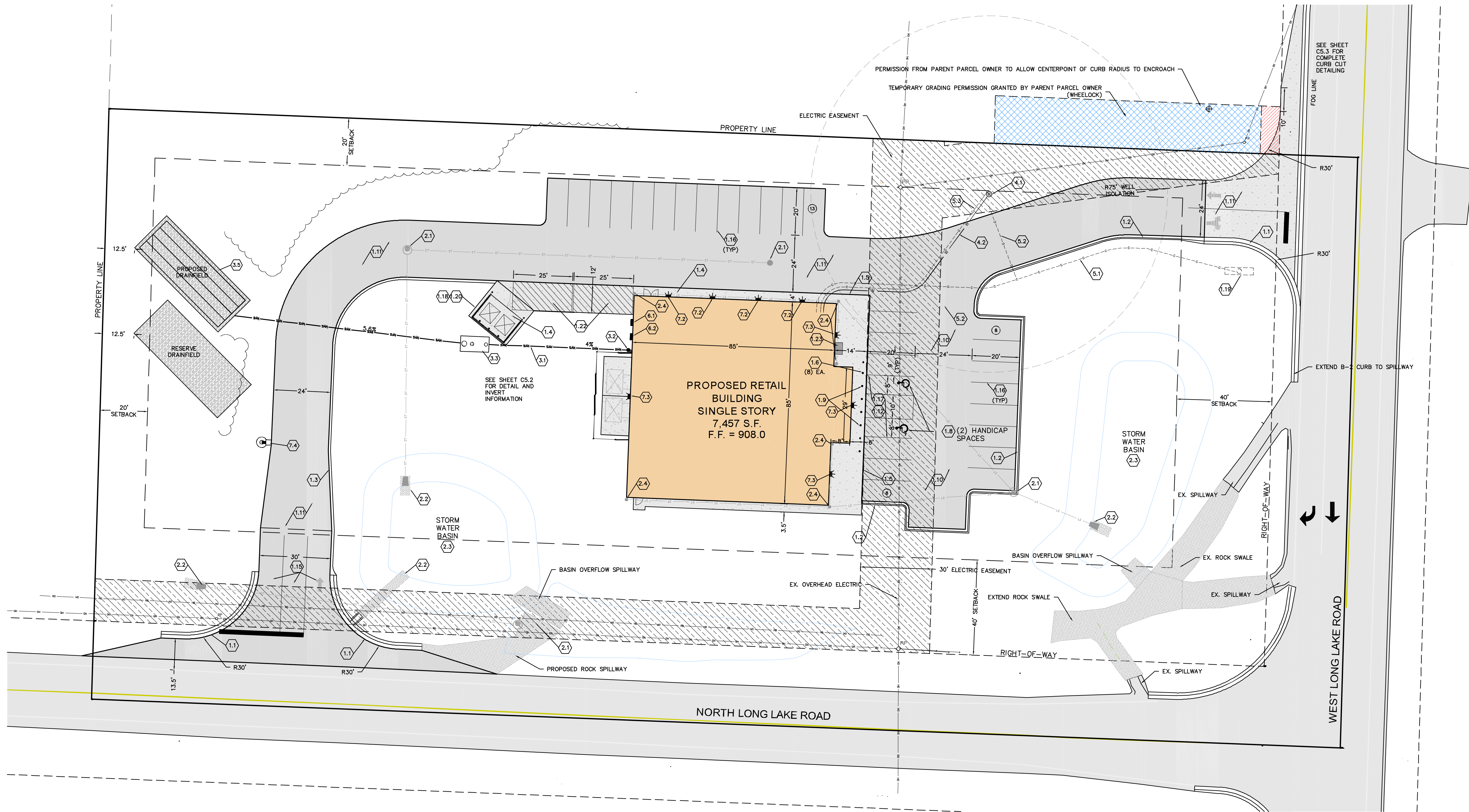
LOCATION

N. LONG LAKE ROAD
TRAVERSE CITY, MI 49685

SITE ENGINEER

jozwiak
consulting
p.o. box 5542 traverse city, mi 49685 | 231.218.1201
www.jozwiakconsulting.com

C1.1



1. Site
- 1.1. Install MDOT B-2 curb with regular pan. See detail C5.3
 - 1.2. Install MDOT F-2 curb with regular pan. See detail C5.3
 - 1.3. Install raised edge asphalt curb. See detail C5.3
 - 1.4. Construct 6" thick unreinforced concrete pad/apron. See detail sheet C5.1
 - 1.5. Construct 4" thick unreinforced concrete sidewalk. See detail sheet C5.1
 - 1.6. Provide and install 6" diameter steel bollards with plastic yellow covers per detail sheet C5.1
 - 1.7. Not used
 - 1.8. Construct pavement, curb and sidewalk in accordance with barrier free parking and sidewalk detail on sheet C5.1
 - 1.9. Provide and install barrier free signs. One sign shall have the van placard. See detail.
 - 1.10. Asphalt paving per detail sheet C5.1
 - 1.11. Heavy Duty Asphalt paving per detail sheet C5.1
 - 1.12. 3" wide striping at 45 degree angle, 3 feet on center. Blue for ADA and yellow for loading zone.
 - 1.13. Not used
 - 1.14. 2 ft wide white stop bar
 - 1.15. Directional arrows, yellow
 - 1.16. Stripe parking lot with 3" wide yellow stripes. Surfaces should be clean and dry. Use Sherwin Williams Promar traffic marking paint, yellow, TMS495.
 - 1.17. Stripe handicap parking spaces with 3" wide blue stripes. Surfaces should be clean and dry. Use Sherwin Williams Promar traffic marking paint, H.C. blue.
 - 1.18. Install concrete dumpster 6" unreinforced concrete pad. See detail sheet C5.1.

- 1.19. Proposed pylon sign location. Design and permitting by others.
 - 1.20. Construct dumpster enclosure with gate. See detail sheet C5.1.
 - 1.21. Maintain existing grade around trees not designated for removal. Protect during construction.
 - 1.22. 12x25 off-street loading space. Need not be striped
 - 1.23. Ice merchandiser (5'x3')
2. Storm
- 2.1. Catch Basin / Storm Inlet. See detail sheet C5.1.
 - 2.2. Stone splash pad. See detail sheet C5.1.
 - 2.3. Construct infiltration basin. See sheet C1-3.
 - 2.4. Downspout connection to storm system
3. Sanitary
- 3.1. Install 4" pvc sch 40 sewer lateral from building to septic tank. Minimum slope to be 1%. Slope and inverts depicted on Sheet C5.2. Install 2" rigid insulation over pipe where it crosses the drive.
 - 3.2. Install clean-out and bring flush with finish grade. See detail sheet C5.2.
 - 3.3. Install 1600 gal double compartment septic tank. See detail sheet C5.2.
 - 3.4. Not used.
 - 3.5. Construct drain field. See detail sheet C5.2.

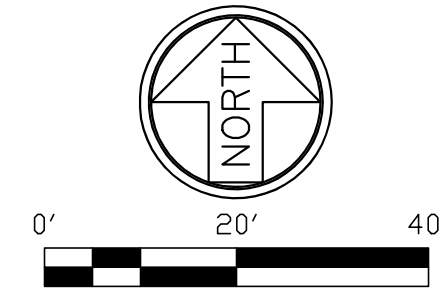
4. Water
- 4.1. Install 5" Type IIB well. Well to maintain 75' isolation to septic and any buried sewer lines
 - 4.2. Install 1" HDPE water service from well to building.
5. Conduit
- 5.1. Install 2" electric conduit to sign
 - 5.2. Install 1-3" sleeve under drive and/or sidewalk for irrigation.
 - 5.3. Install 2" conduit to well
6. Other Utilities
- 6.1. Gas meter location. Coordinate with architectural plans and utility provider.
 - 6.2. Electric meter and phone connection location. Coordinate with architectural plans and utility provider.
7. Site Lighting
- 7.1. Lighting shall meet the Township Zoning Ordinance and shall not be mounted higher than 20' and shall be shielded to the surface so as not to shine onto any adjacent properties, public right of ways or sky.
 - 7.2. US Led QubePAK Regal 3, 58w, 3000k, Type II distribution, mounted 12'4" above grade
 - 7.3. US Led QubePAK Regal 3, 58w, 3000k, Type II distribution, mounted 16' above grade
 - 7.4. US Led Dorado XLE Plus, 100w, 3000k Type II distribution, mounted 16' above finish grade.

LEGEND

	EXISTING ASPHALT PAVEMENT
	EXISTING GRAVEL
	ASPHALT PAVEMENT
	HEAVY DUTY ASPHALT PAVEMENT
	CONCRETE SIDEWALK

KEYED NOTES

NOTE:
ALL SLOPES SHALL BE STABILIZED WITH MULCH
BLANKET AND ANCHORED IN ACCORDANCE WITH
MANUFACTURERS SPECIFICATIONS



GRADING EASEMENT TO BE PROVIDED BY PARENT PARCEL OWNER (SELLER)

CHERRYLAND ELECTRIC TO REPLACE POLE
SEGMENTAL BLOCK RETAINING WALL

BENCH AN AREA
FOR THE WELL
INSTALLATION

MATCH ASPHALT

MODIFIED MDOT
F-2 CURB

MDOT B-2 CURB

MATCH ASPHALT

EX. SPILLWAY

EX. SPILLWAY

EX. SPILLWAY

EX. SPILLWAY

EX. SPILLWAY

EX. SPILLWAY

EX. SPILLWAY

EX. SPILLWAY

EX. SPILLWAY

EX. SPILLWAY

EX. SPILLWAY

PROPOSED RETAIL
BUILDING
(F.F. = 908.00)

STORMWATER
INFILTRATION BASIN #1
TOP OF BASIN ELEV=892.5
BTM ELEV=889.00

STORMWATER
INFILTRATION
BASIN #2
TOP EL=900.00
BTM EL=896.00

INFILTRATION BASIN #1 EMERGENCY OVERFLOW SPILLWAY
BOTTOM OF STONE=892.0

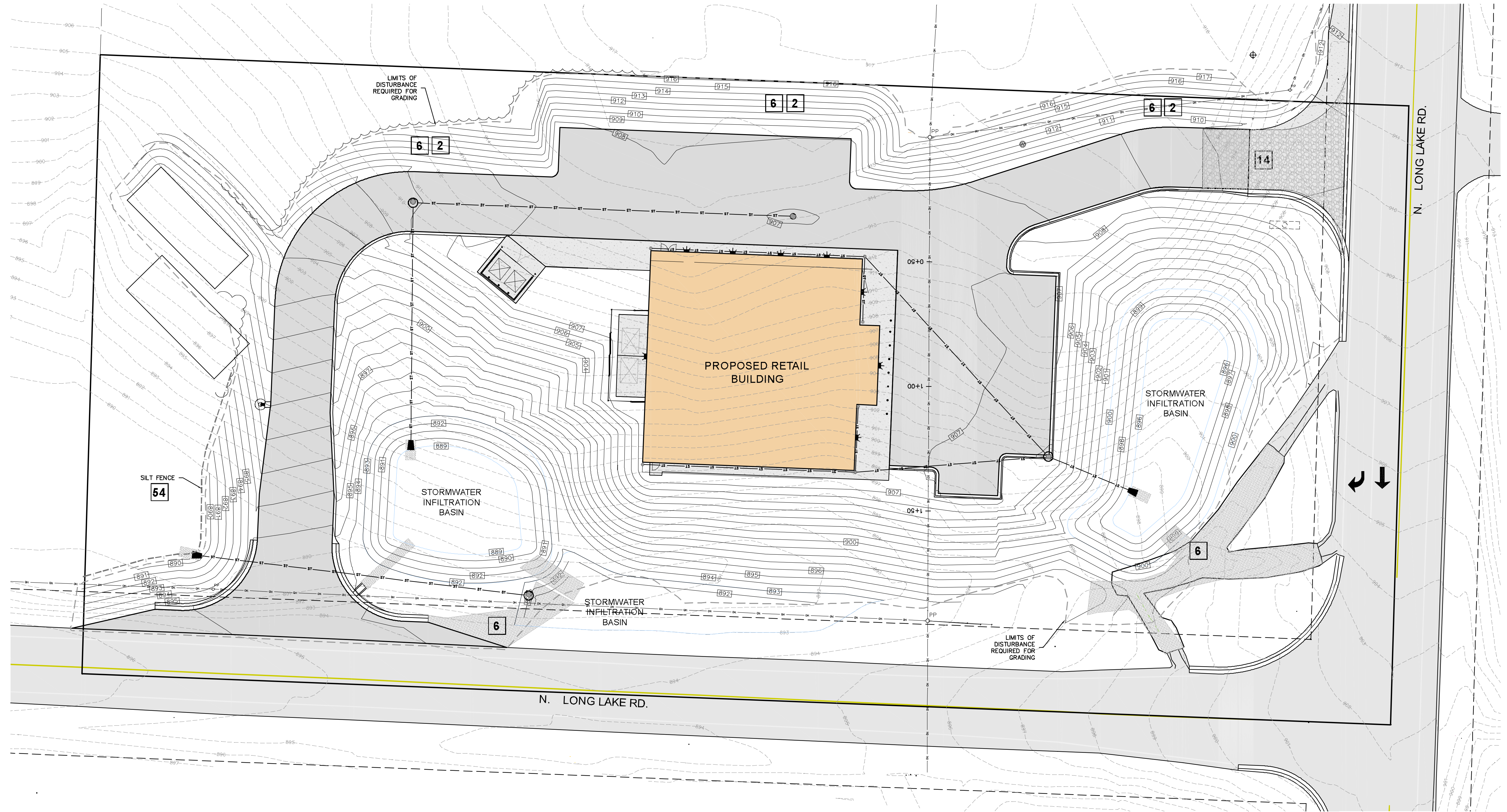
INFILTRATION BASIN OVERFLOW SPILLWAY
BOTTOM OF STONE=899.5

PURPOSE OF OVERFLOW STRUCTURE D1
IS TO ALLOW RUNOFF FROM ROAD
RIGHT OF WAY TO BE RETAINED AS
OPPOSED TO CONTINUING WEST
UNCONTROLLED AS IT IS ALLOWED TO
CURRENTLY OCCUR.

PLACE STONE ON FABRIC AS SHOWN TO DITCH LINE

NOTE:
ALL SLOPES SHALL BE STABILIZED WITH MULCH
BLANKET AND ANCHORED IN ACCORDANCE WITH
MANUFACTURERS SPECIFICATIONS

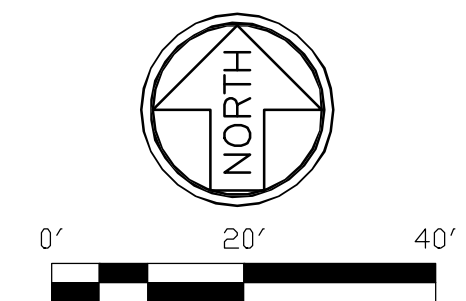
NOTE:
ALL GRADES ALONG CURBS ARE TOP OF PAVEMENT
(BOTTOM OF CURB FACE). SURVEYOR AND CONTRACTOR
TO PROVIDE NECESSARY CALCULATIONS TO ESTABLISH
TOP-BACK OF CURB AND SIDEWALK ELEVATIONS.



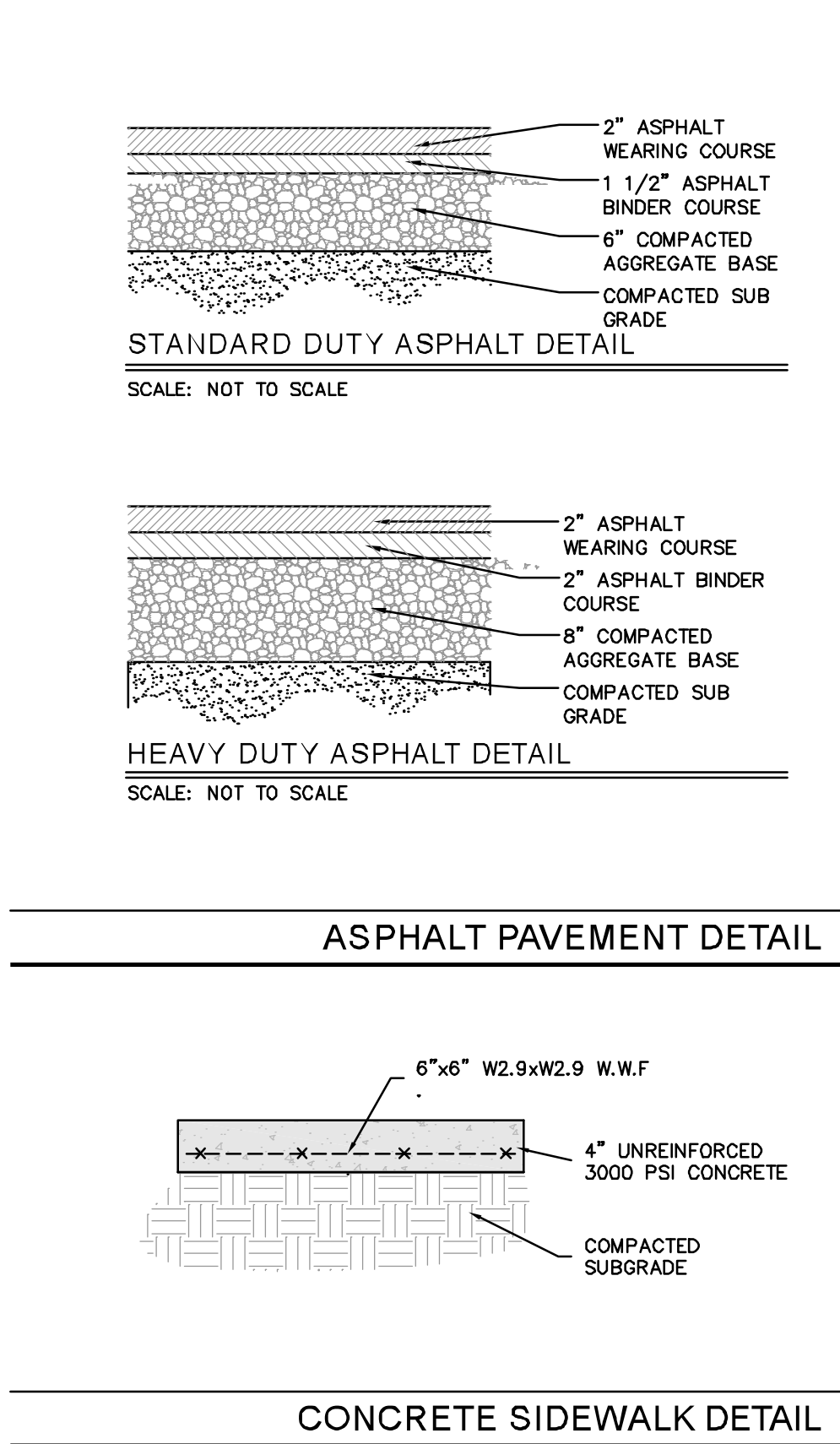
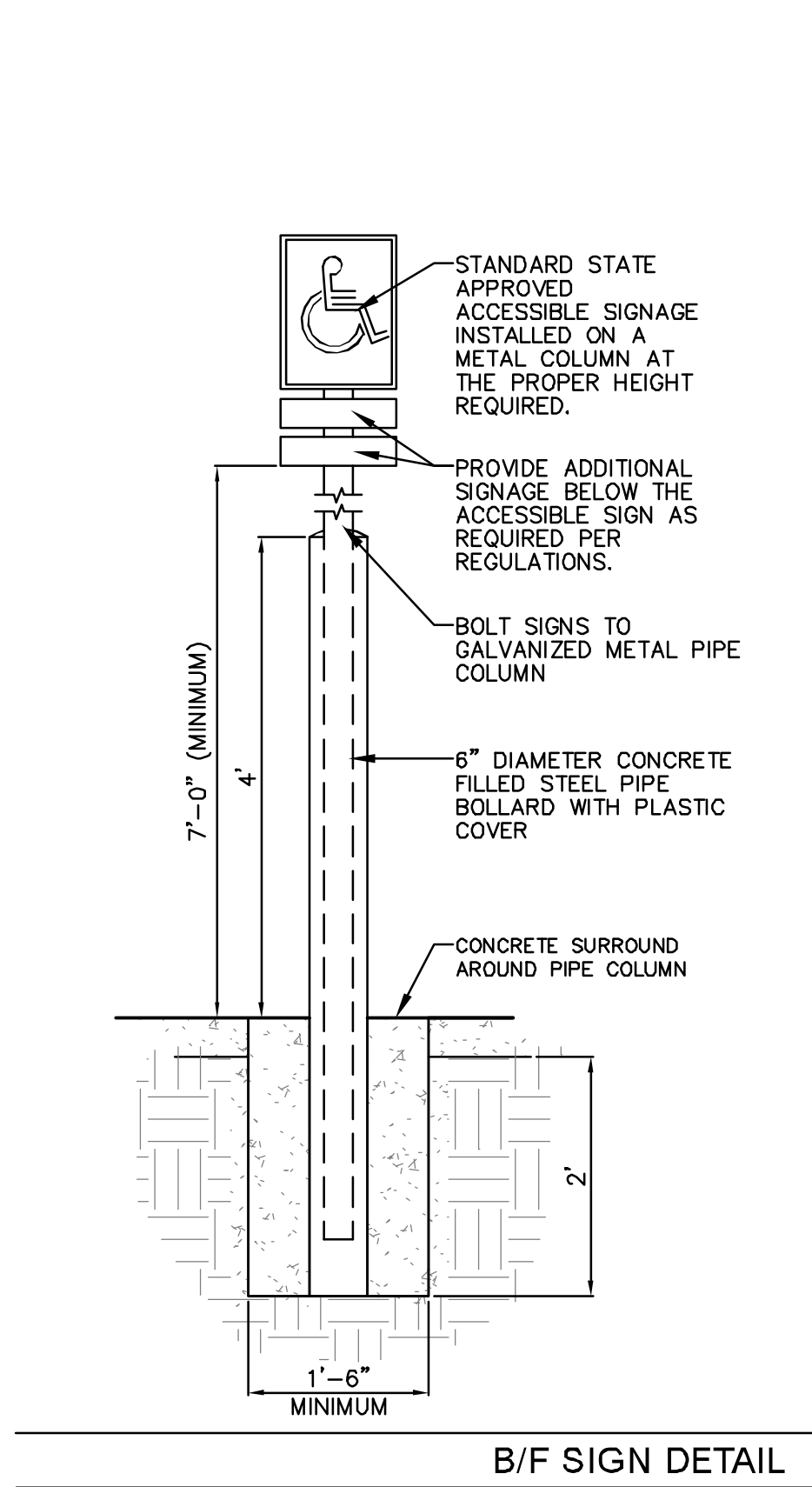
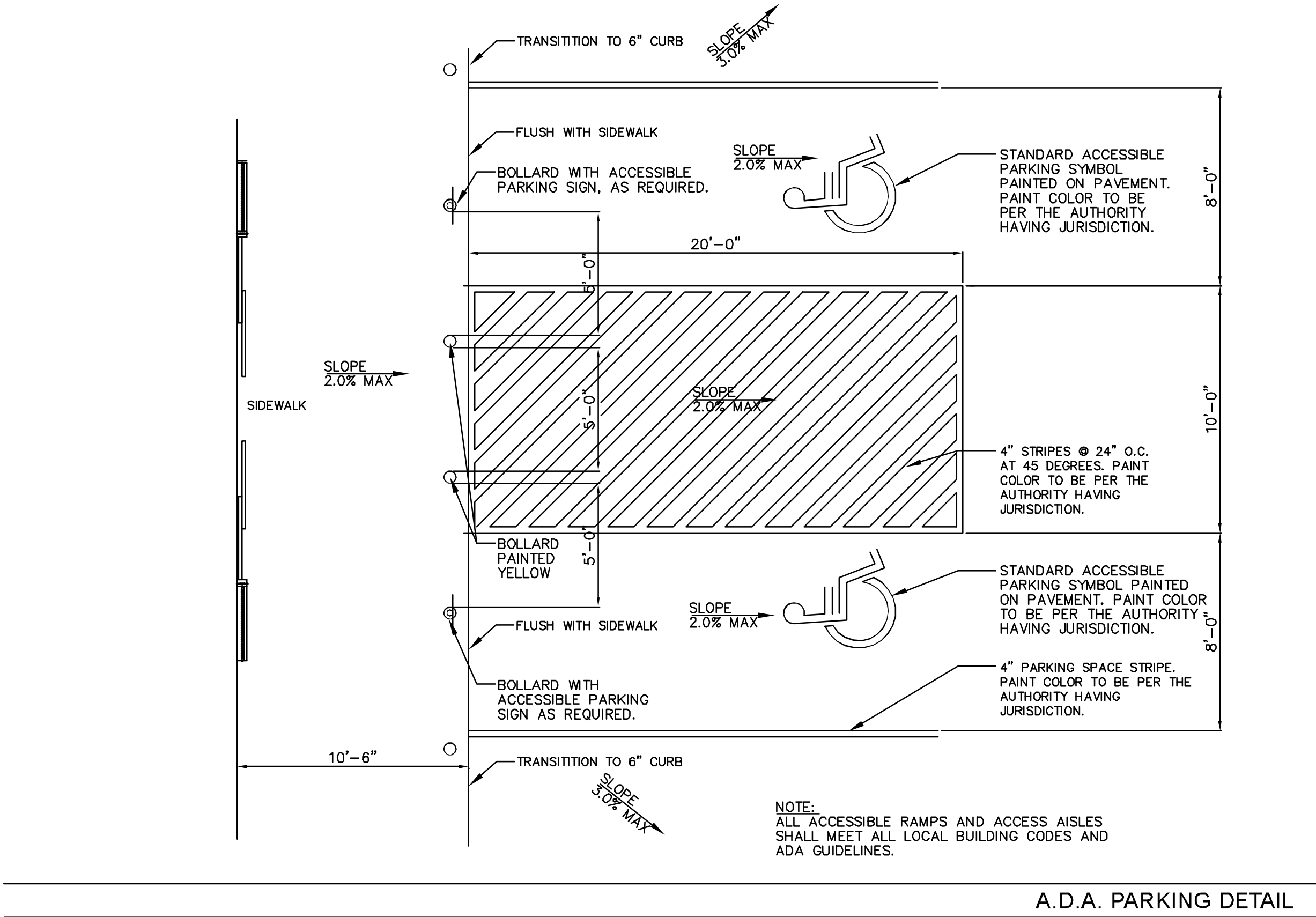
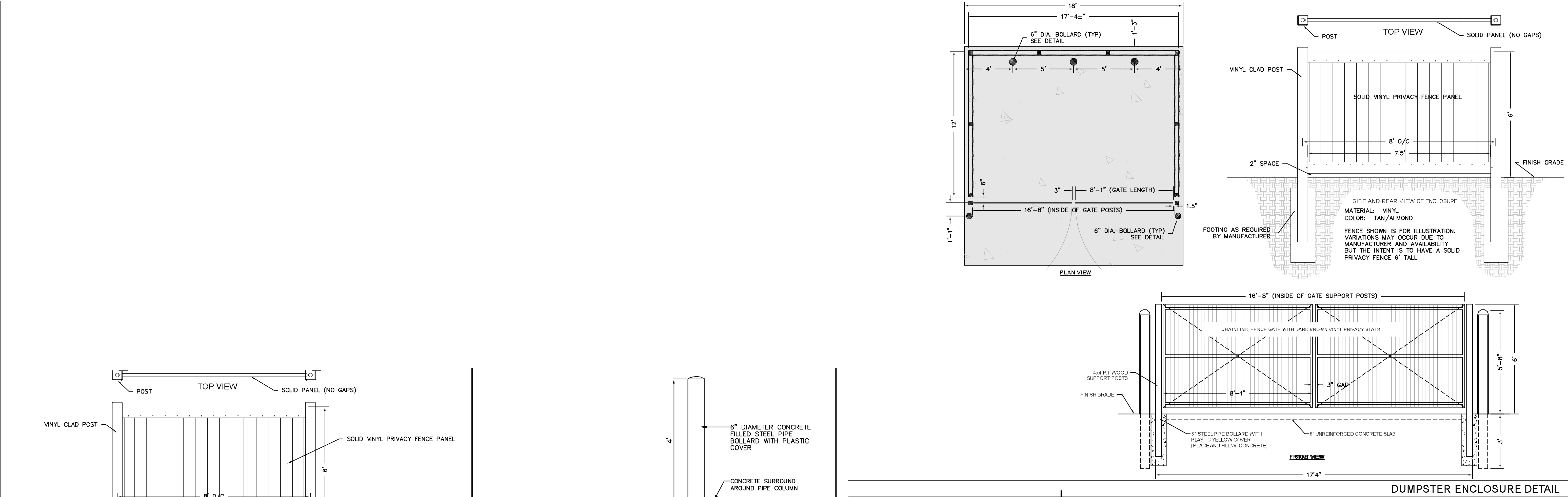
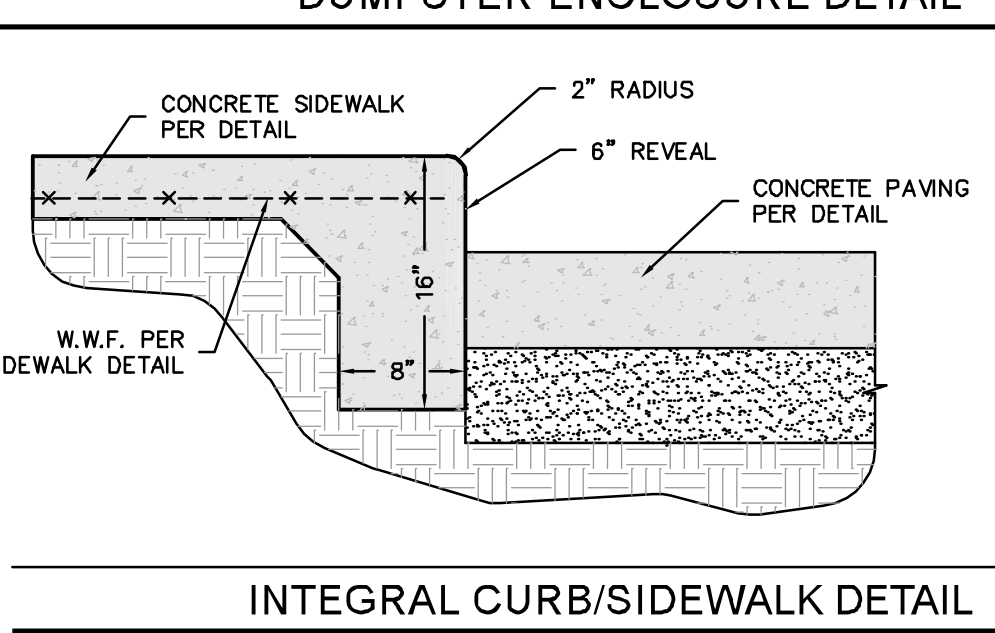
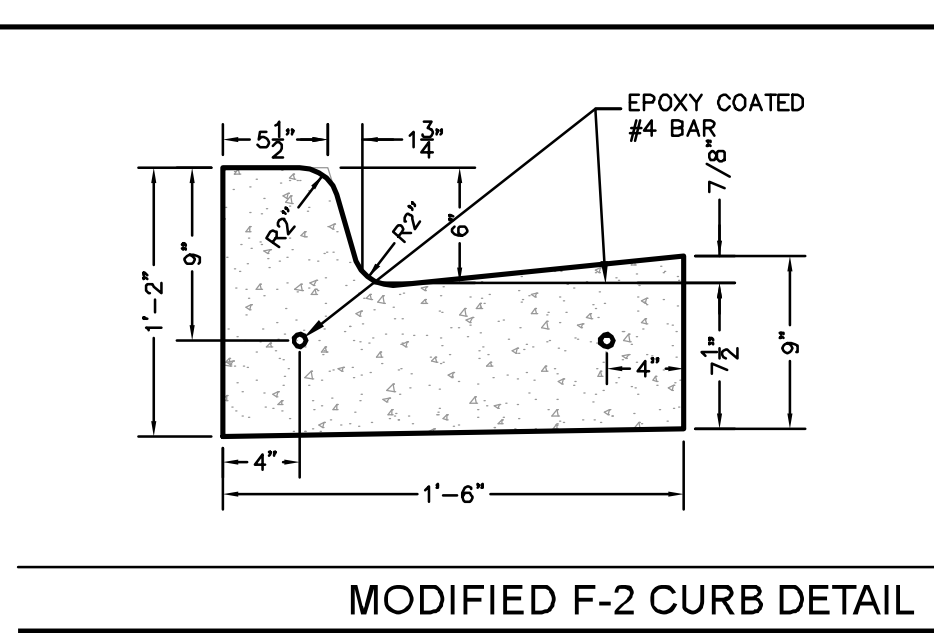
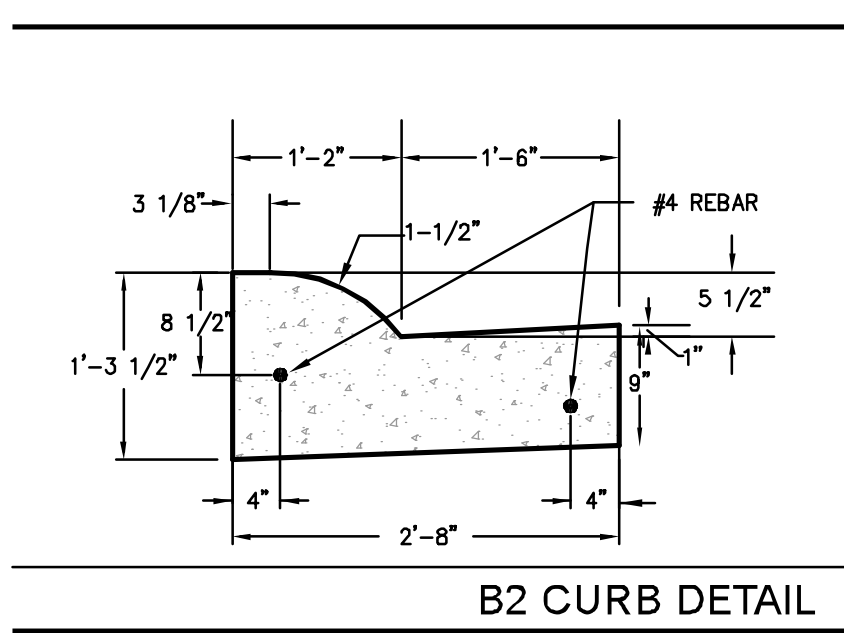
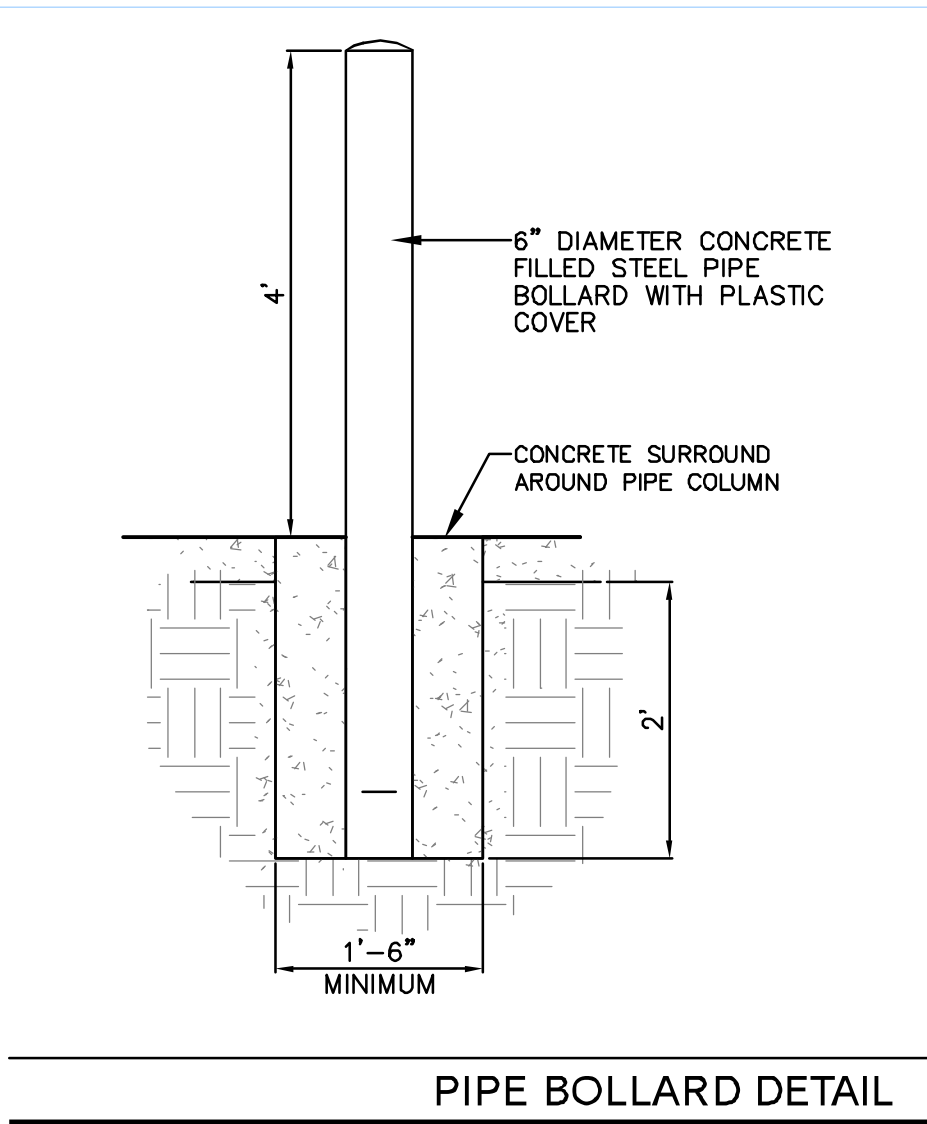
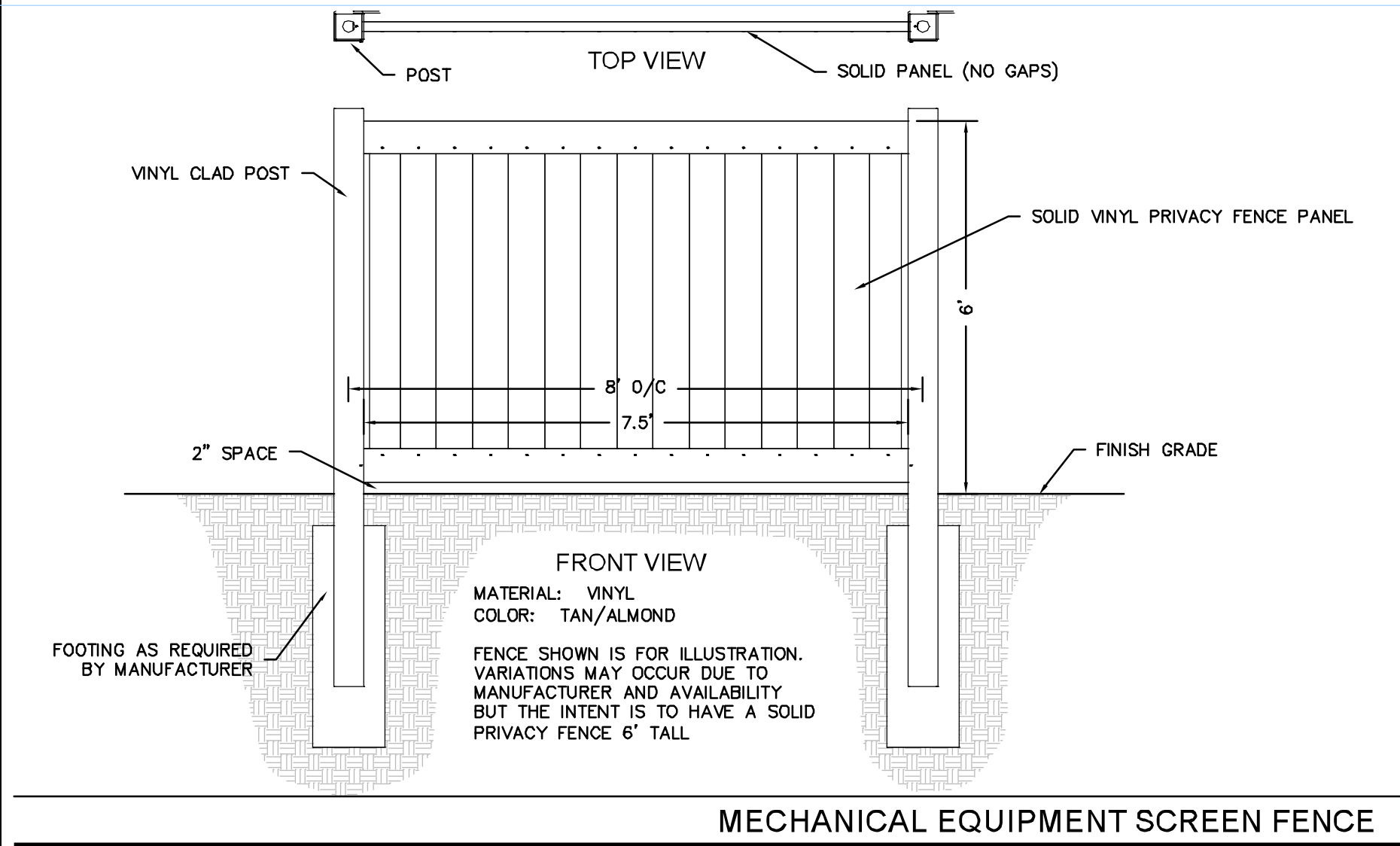
APPLIED AT % SITEWORK COMPLETE	KEY	DETAIL	CHARACTERISTICS
20%	2	Selective Grading & Shaping	Water can be diverted to minimize erosion Flatter slopes ease erosion problems
10-50%	6	Seeding with Mulch Blanket and/or Matting	Facilitates establishment of vegetative cover Effective for drainageways with low velocity Easily placed in small quantities by inexperienced personnel Should include prepared topsoil bed
20%	14	Anti-Tracking Pad	Stabilizes surface, thus minimizing erosion Permits construction traffic in adverse weather May be used as part of permanent base construction of paved areas
80-100%	15	Paving	Protects areas which cannot otherwise be protected, but increases runoff volume and velocity Irregular surface will help slow velocity
90-100%	16	Curb & Gutter	Keeps high velocity runoff on paved areas from leaving paved surface Collects and conducts runoff to enclosed drainage system or prepared drainageway

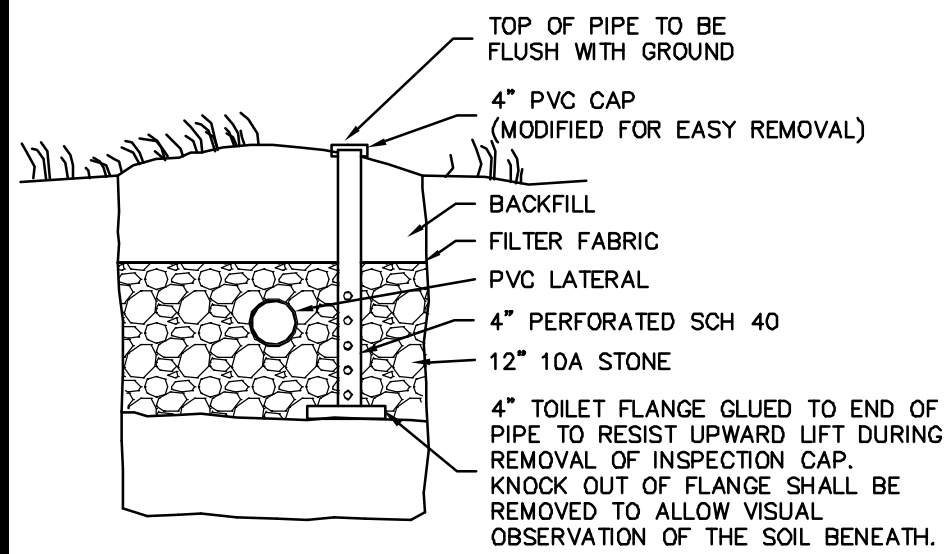
APPLIED AT % SITEWORK COMPLETE	KEY	DETAIL	CHARACTERISTICS
90-100%	35	Storm Sewer	System removes collected runoff from site, particularly from paved area Can accept large concentrations of runoff Conducts runoff to municipal sewer system or stabilized outfall location Use catch basins to collect sediment
40-100%	36	Catch Basin, Drain Inlet	Collects high velocity concentrated runoff Use filter cloth over inlet
0-100%	38	Silt Fence Straw Bale Filter	Filters and detains runoff Inexpensive and easy to construct Can be located as necessary to collect sediment May be used in conjunction with snow fence for added stability
1%	54	Silt Fence	Filters and detains runoff

DISTURBANCE LIMITS = 95,000 SF 2.2 ACRES)
NEAREST WATERBODY: BULLHEAD LAKE IS LOCATED 1,000 FEET TO THE EAST OF THE PROJECT.

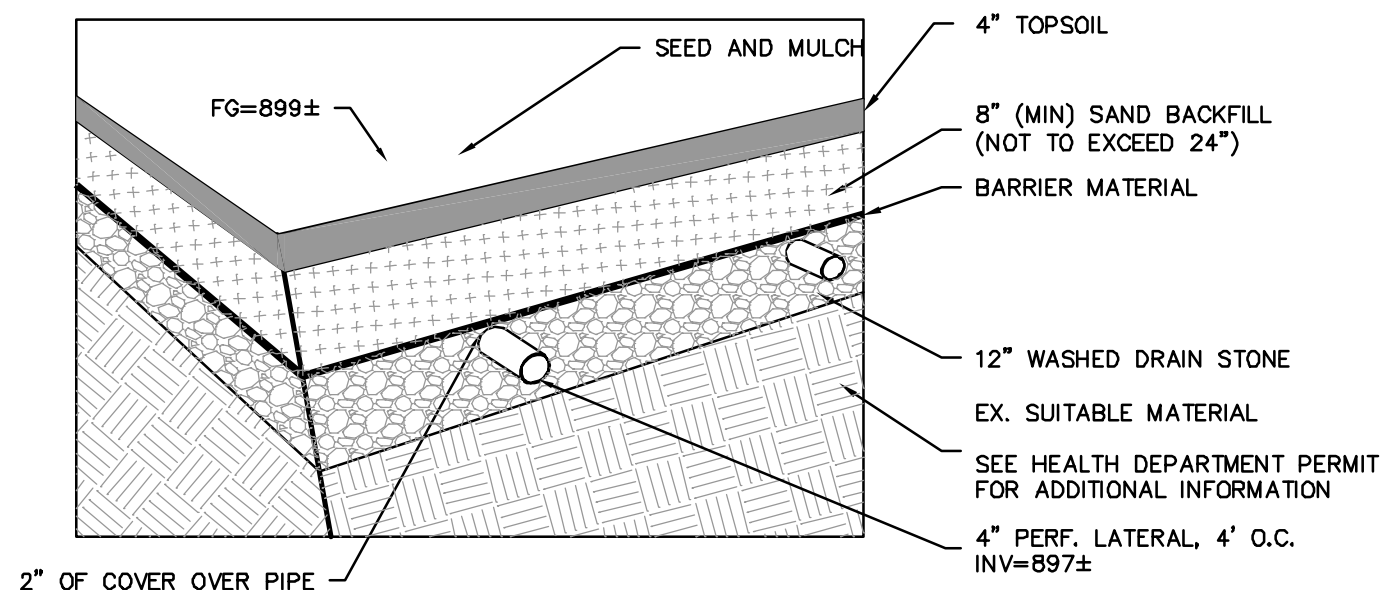


SOIL EROSION CONTROL INFORMATION

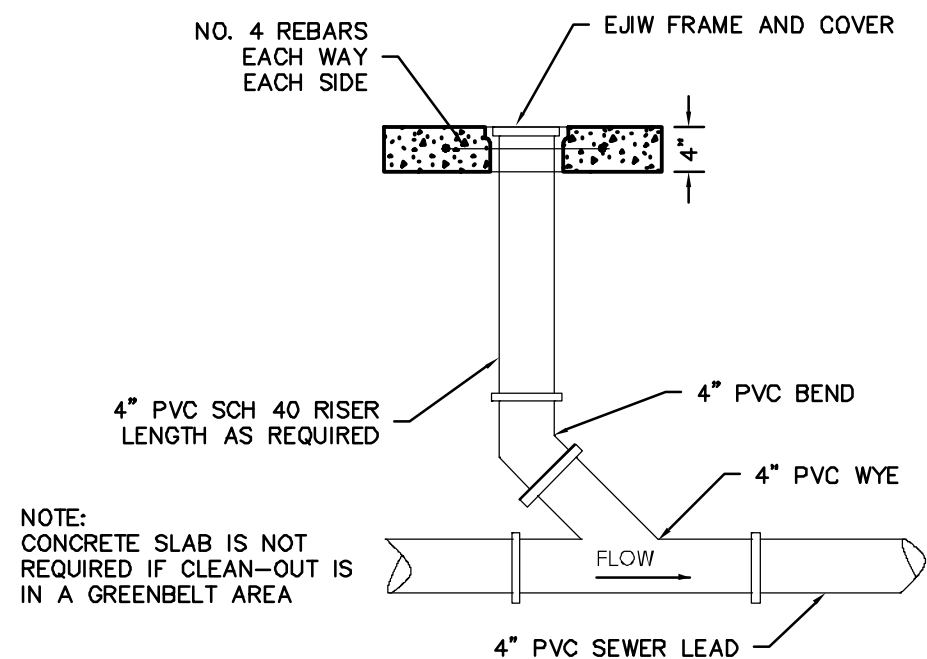




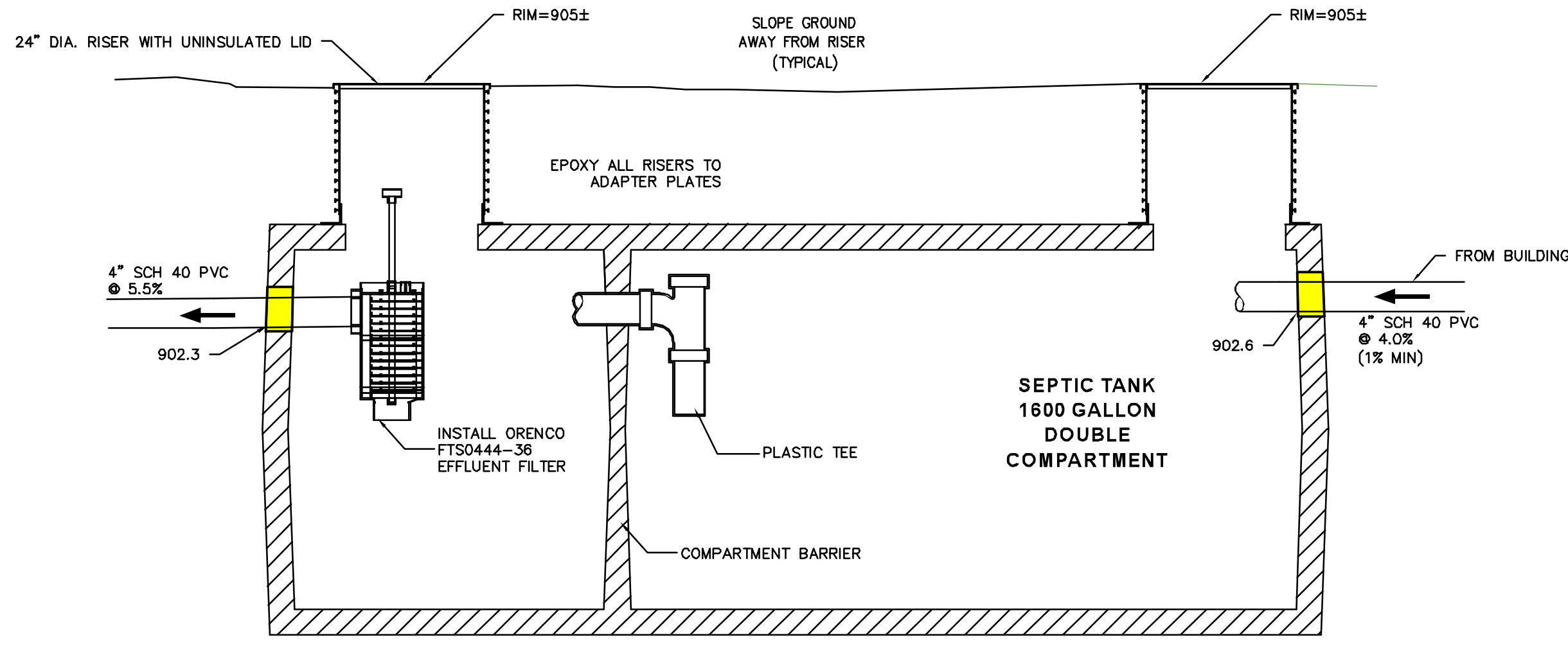
INSPECTION PORT DETAIL



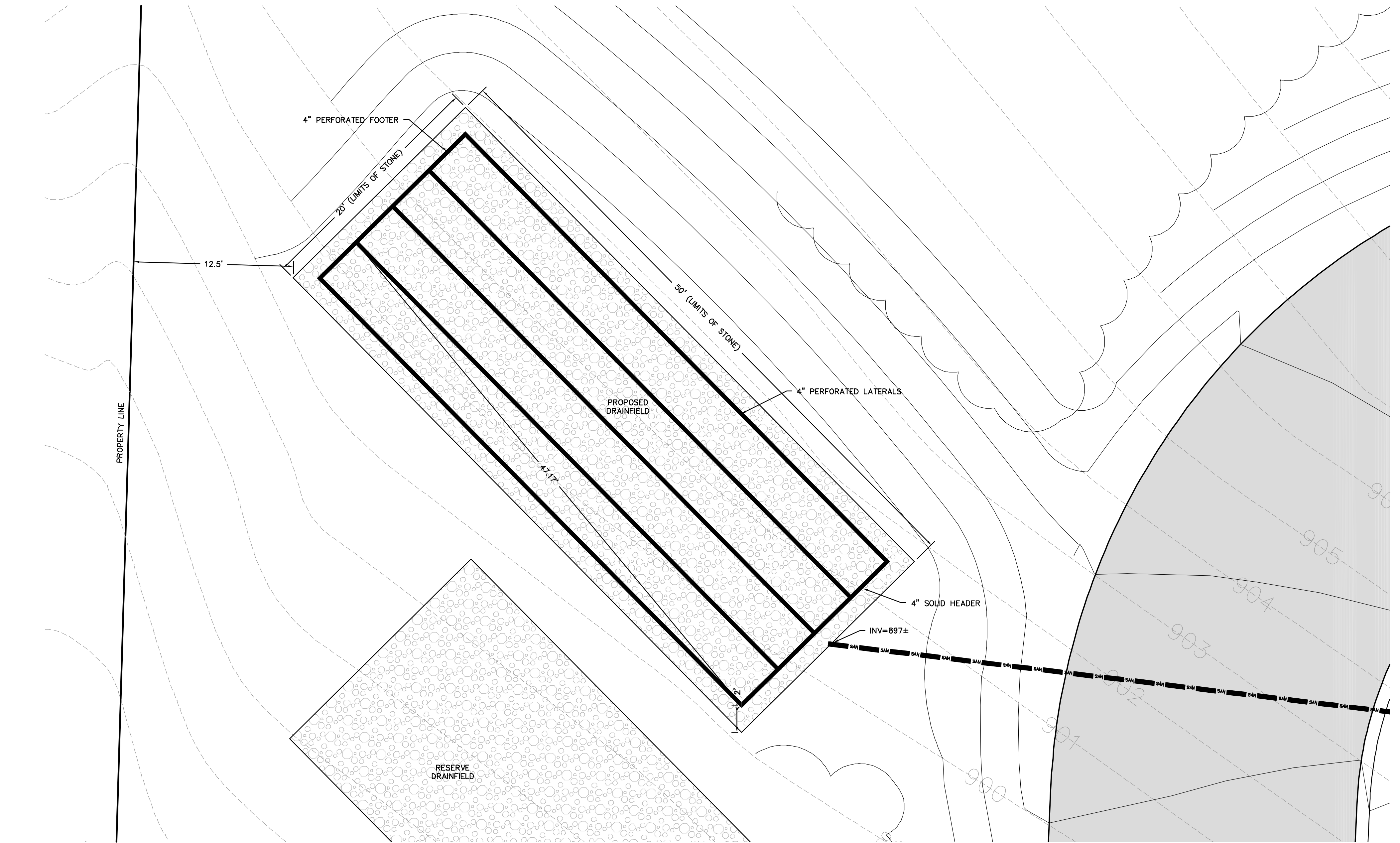
DRAIN FIELD SECTION VIEW DETAIL



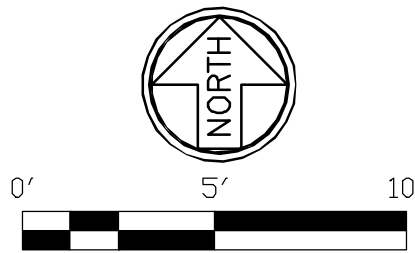
CLEAN-OUT DETAIL

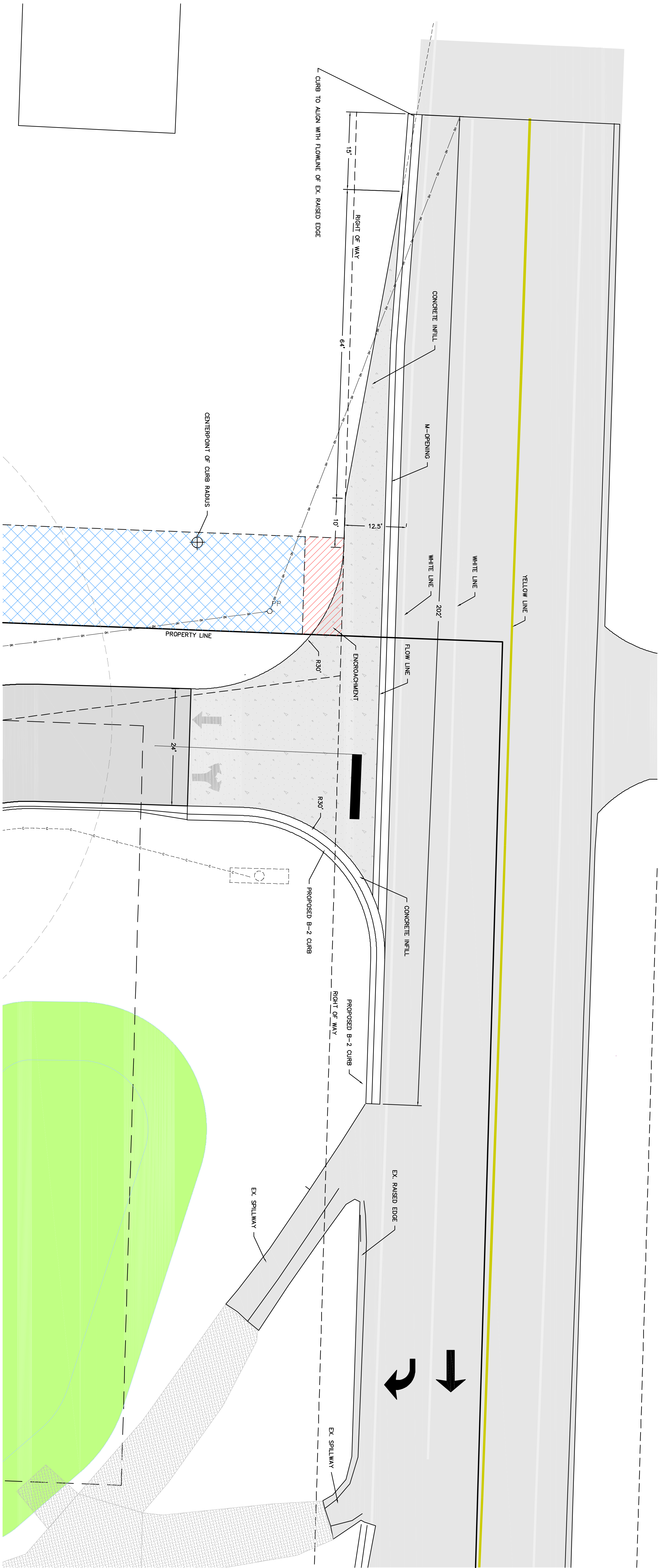


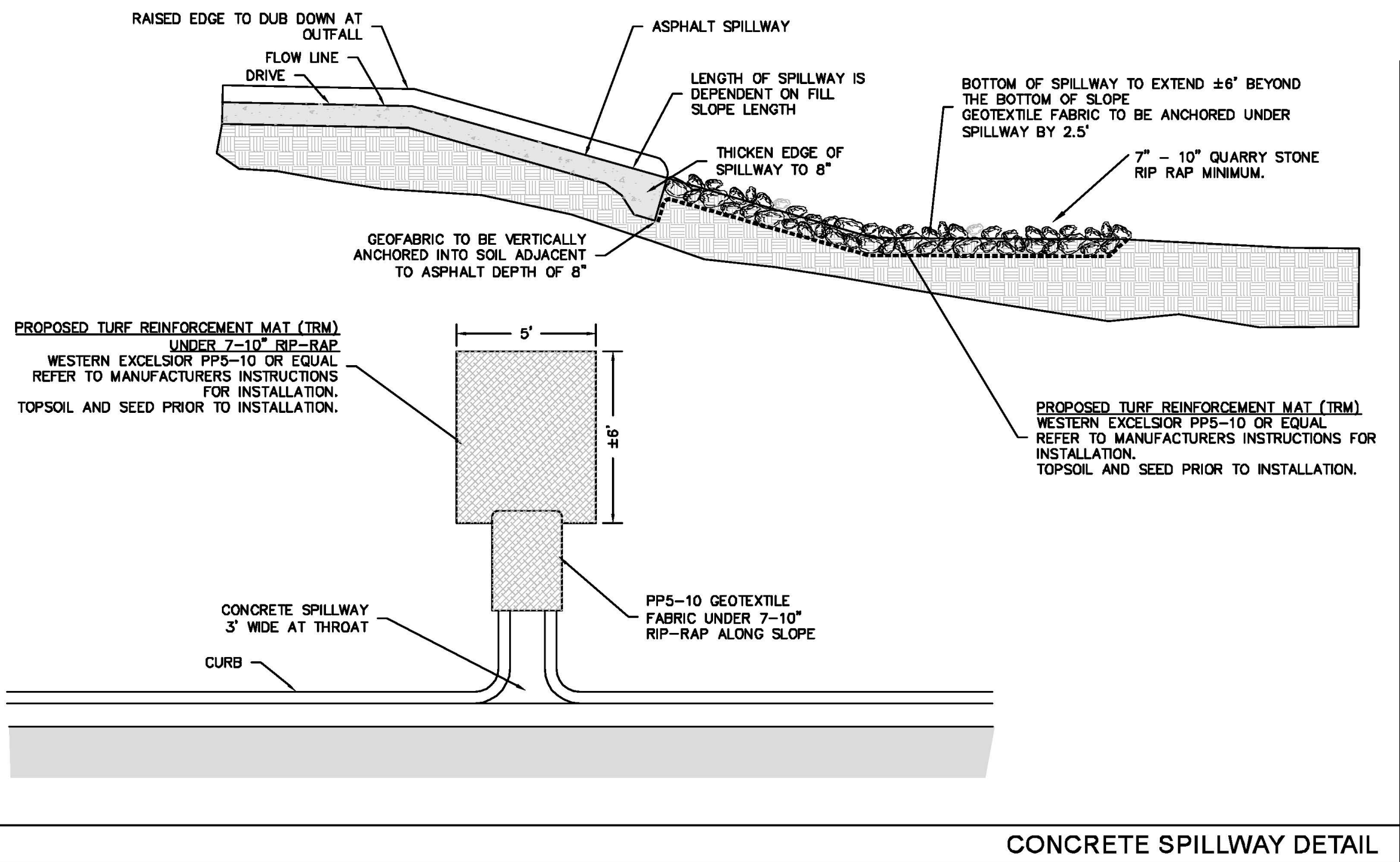
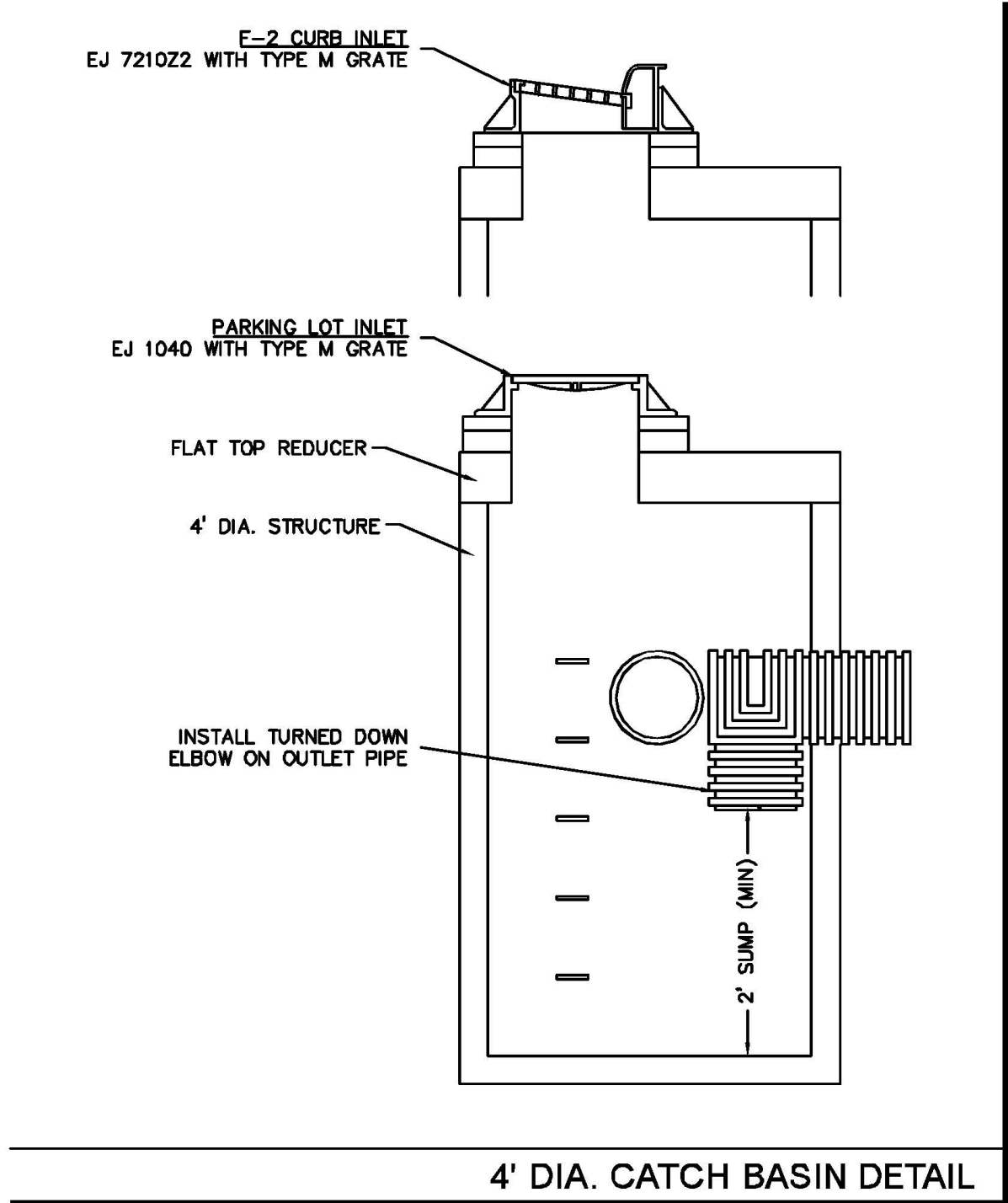
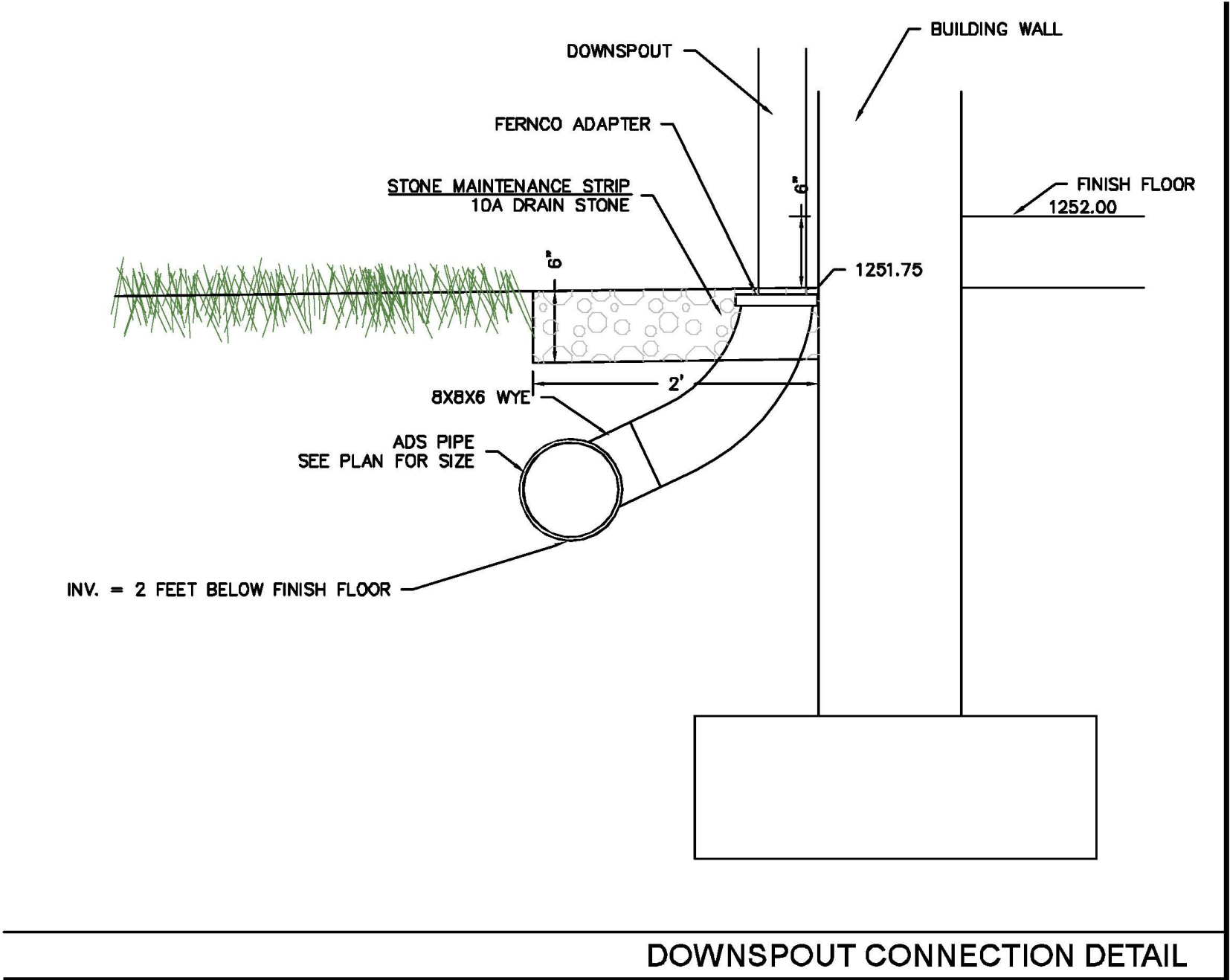
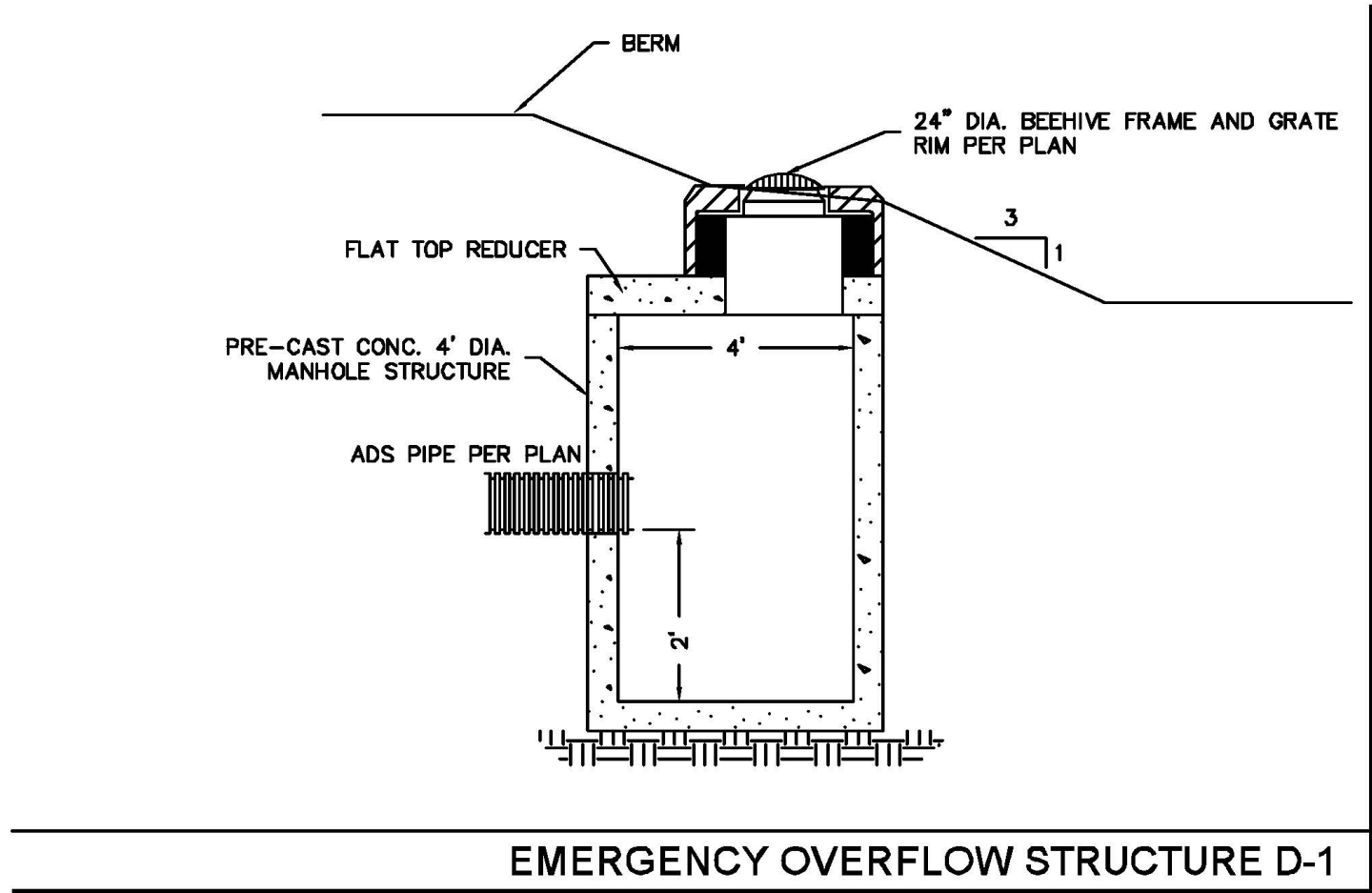
SEPTIC TANK DETAIL



ENLARGED PLAN DETAIL OF DRAIN FIELD







BASIS OF DESIGN
DESIGNED FOR 25 YEAR STORM EVENT
DESIGN INFILTRATION RATE = 0.5 IN/HR

TB-11:
1.1 in/hr.
SAND - fine silty

PROVIDED BY SOILS AND STRUCTURES
LAB DATA AVAILABLE UPON REQUEST

STORMWATER
INFILTRATION BASIN #1

Inflow Area =	0.794 ac.	36.99% Impervious,	Inflow Depth = 1.67' for 25-Year event
Inflow =	1.47 cfs @ 12.31 hrs,	Volume=	0.111 af
Outflow =	0.03 cfs @ 18.82 hrs,	Volume=	0.052 af, Atten= 98%, Lag= 390.6 min
Discarded =	0.03 cfs @ 18.82 hrs,	Volume=	0.052 af
Primary =	0.00 cfs @ 1.00 hrs,	Volume=	0.000 af

Routing by Stor-Ind method, Time Span= 1.00-32.00 hrs, dt= 0.05 hrs
Peak Elev= 890.57' @ 18.82 hrs Surf Area= 2,741 sf Storage= 3,658 cf

Plug-Flow detention time= 571.8 min calculated for 0.052 af (47% of inflow)
Center-of-Mass det. time= 478.7 min (1,308.3 - 829.6)

Volume	Invert	Avail Storage	Storage Description
#1	889.00'	9,921 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
889.00	1,916	0	0
892.50	3,753	9,921	9,921

Device	Routing	Invert	Outlet Devices
#1	Discarded	889.00'	0.500 in/hr Exfiltration over Surface area
#2	Primary	892.00'	8.0' long x 8.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50 4.00 4.50 5.00 5.50
			Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.68 2.64 2.64
			2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

Discarded Outflow Max=0.03 cfs @ 18.82 hrs HW=890.57' (Free Discharge)
1-Exfiltration (Exfiltration Controls 0.03 cfs)

Primary Outflow Max=0.00 cfs @ 1.00 hrs HW=889.00' (Free Discharge)
2-Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Inflow Area =	0.821 ac.	54.45% Impervious,	Inflow Depth = 2.13' for 25-Year event
Inflow =	1.95 cfs @ 12.30 hrs,	Volume=	0.146 af
Outflow =	0.64 cfs @ 12.70 hrs,	Volume=	0.146 af, Atten= 67%, Lag= 24.2 min
Discarded =	0.64 cfs @ 12.70 hrs,	Volume=	0.146 af
Primary =	0.00 cfs @ 1.00 hrs,	Volume=	0.000 af

Routing by Stor-Ind method, Time Span= 1.00-32.00 hrs, dt= 0.05 hrs
Peak Elev= 896.70' @ 12.70 hrs Surf Area= 2,771 sf Storage= 1,739 cf

Plug-Flow detention time= 20.5 min calculated for 0.146 af (100% of inflow)
Center-of-Mass det. time= 20.5 min (837.9 - 817.4)

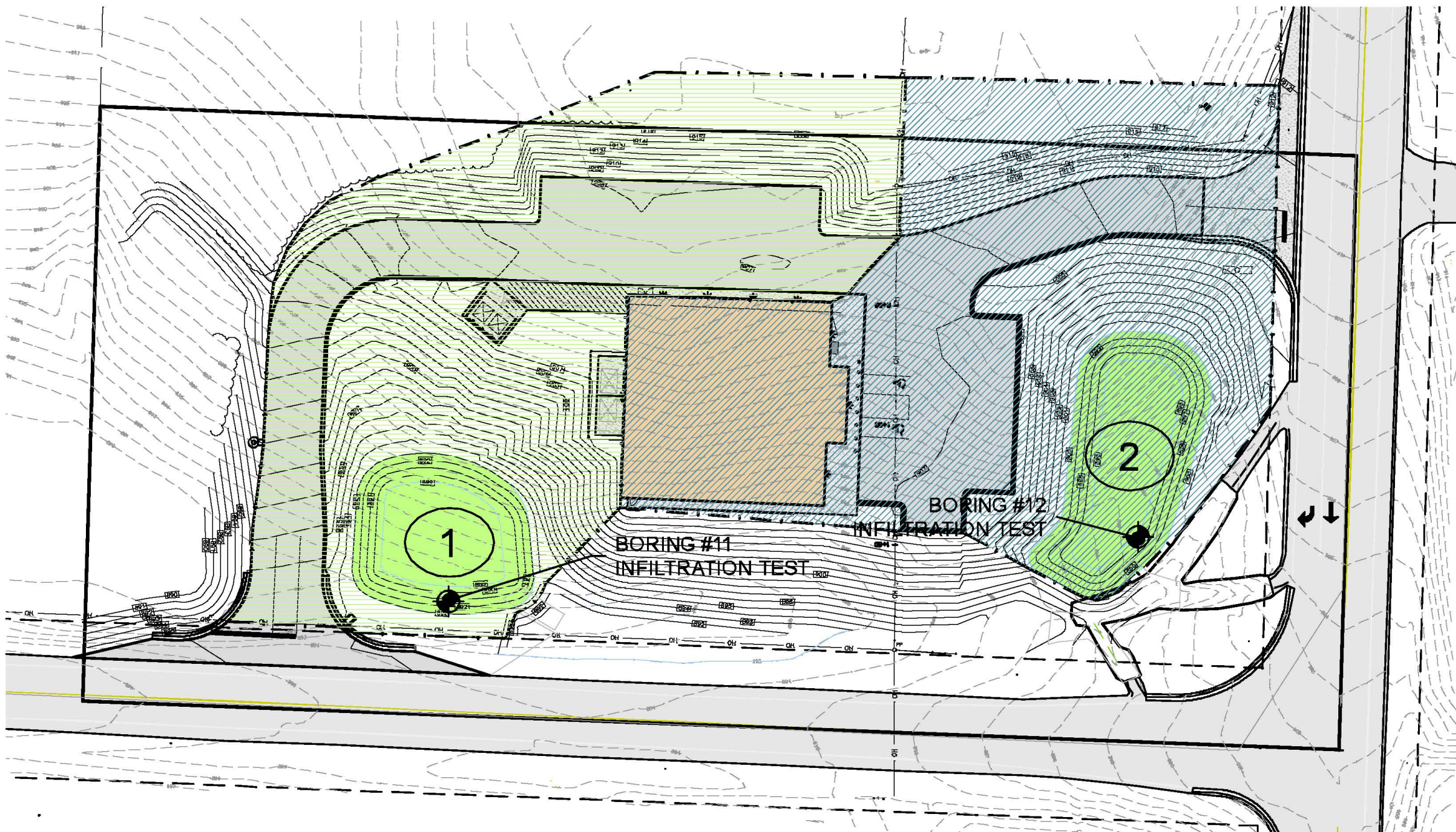
Volume	Invert	Avail Storage	Storage Description
#1	896.00'	15,172 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
896.00	2,225	0	0
900.00	5,361	15,172	15,172

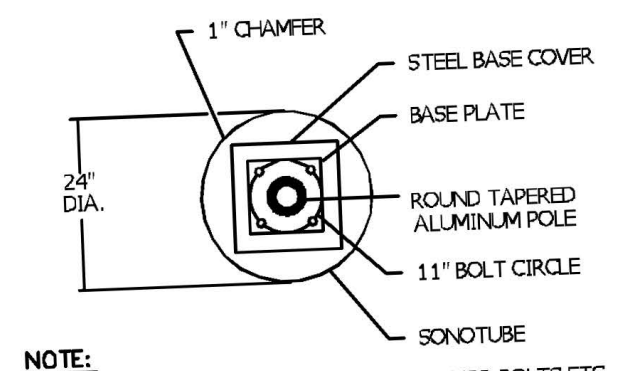
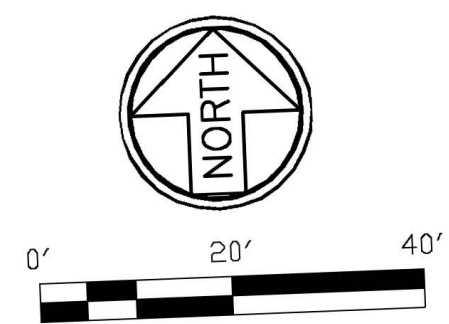
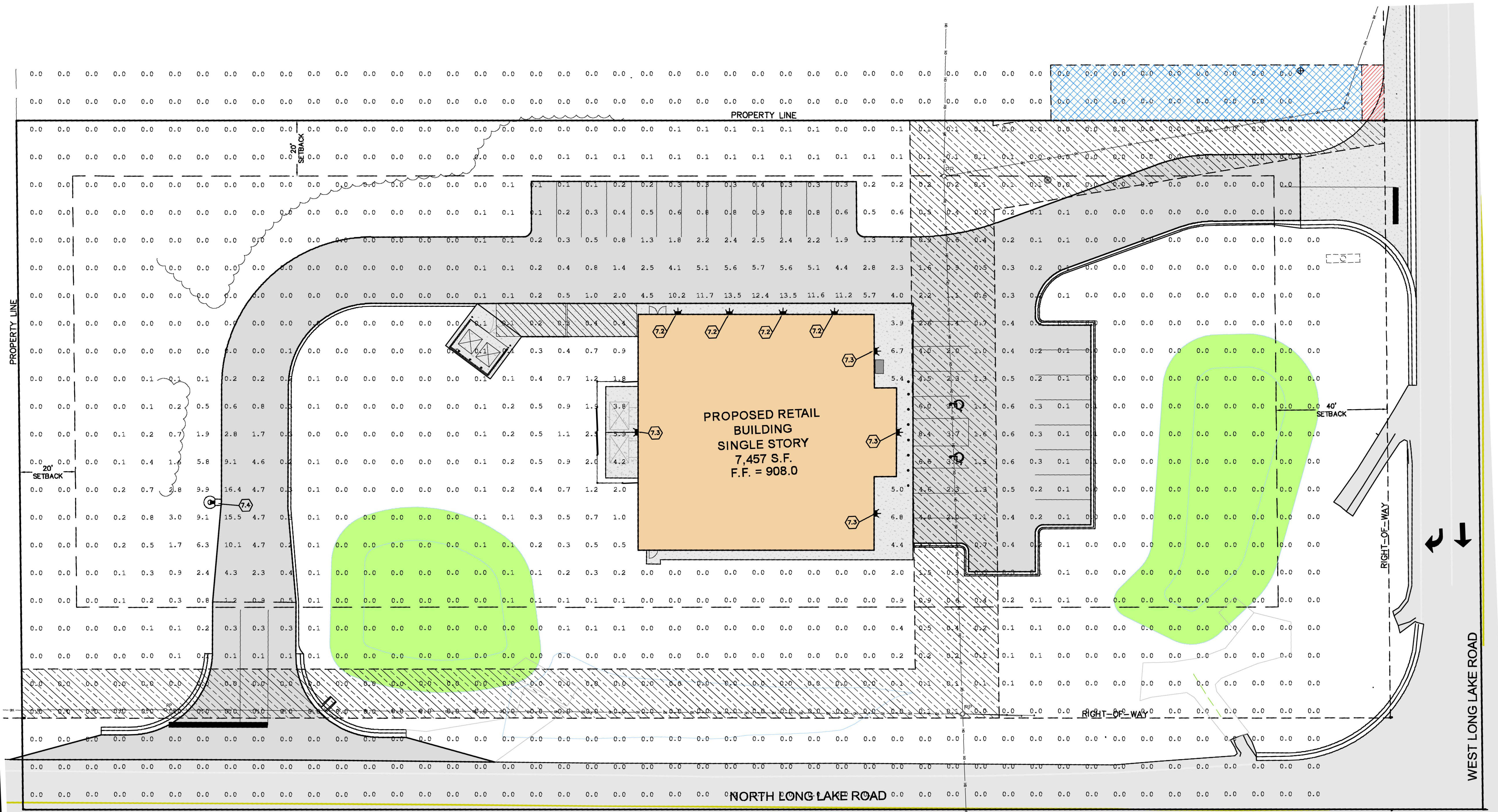
Device	Routing	Invert	Outlet Devices
#1	Discarded	896.00'	10.000 in/hr Exfiltration over Surface area
#2	Primary	899.50'	8.0' long x 8.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50 4.00 4.50 5.00 5.50
			Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64
			2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

Discarded Outflow Max=0.64 cfs @ 12.70 hrs HW=896.70' (Free Discharge)
1-Exfiltration (Exfiltration Controls 0.64 cfs)

Primary Outflow Max=0.00 cfs @ 1.00 hrs HW=896.00' (Free Discharge)
2-Broad-Crested Rectangular Weir (Controls 0.00 cfs)

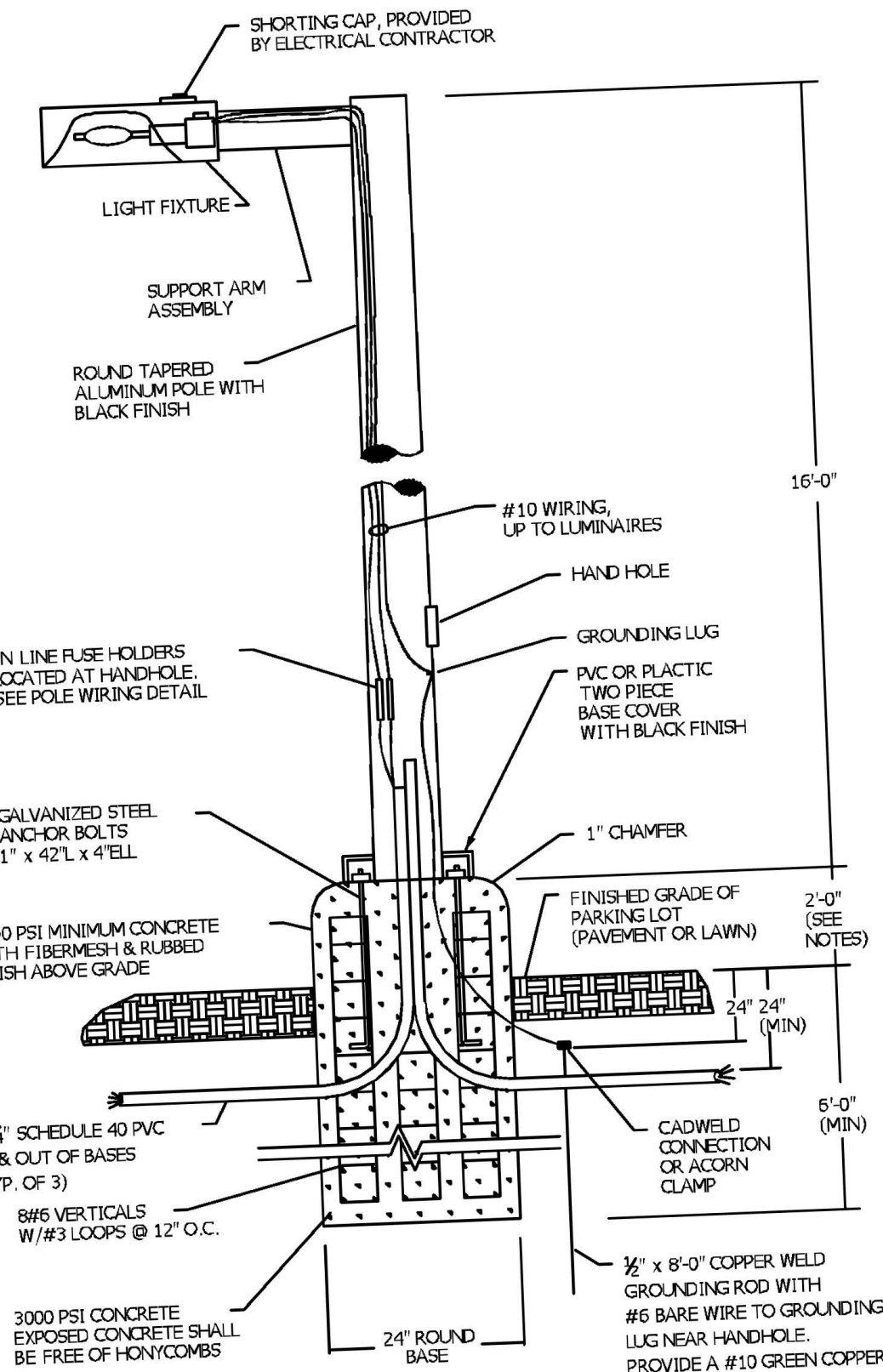
STORMWATER MANAGEMENT ANALYSIS





NOTE: ALL LOCATIONS AND DIMENSIONS FOR ANCHOR BOLTS ETC. SHALL BE VERIFIED IN FIELD BY ELECTRICAL CONTRACTOR WITH BOLTS AS FURNISHED BY POLE MANUFACTURER.

PLAN VIEW - BASE



NOTES:
1. WHEN INSTALLING PARKING LOT LIGHTING IN LAWN AREAS AROUND THE PARKING LOT OR IN ISLANDS OR BERMS INSIDE THE PARKING LOT, ADJUST THE EXPOSED HEIGHT OF THE BASE SO THAT THE TOP OF THE BASE IS 2'-0\"/>

TYPICAL PARKING LOT FIXTURE DETAIL
NO SCALE

7. Site Lighting
- 7.1. Lighting shall meet the Township Zoning Ordinance and shall not be mounted higher than 20' and shall be shielded to the surface so as not to shine onto any adjacent properties, public right of ways or sky.
- 7.2. US Led QubePAK Regal 3, 58w, 3000K, Type II distribution, mounted 12'4\"/>

KEYED NOTES

USLED
Always the Right Choice!

DoradoXLE Plus
Outdoor LED Area/Site & Flood

Key Features

- Outdoor applications benefit from superior photometric performance and uniformity.
- Low-profile design provides a contemporary appearance and is right sky friendly.
- Precision mounted optics are sealed to protect against environmental contaminants.
- Easy installation by one person in the field.
- Photocell and motion sensor accessories are available to be installed.

Construction

- Rugged die-cast aluminum housing protects integral components from harsh environments and optimizes thermal management.
- Housing is protected by a corrosion resistant powder coat finish.
- Standard dark bronze finish. Custom colors available upon request.*
- IP65 rated enclosure prevents environmental elements from degrading performance.

Optics

- IP67 rated LED light engine prevents dirt and moisture from degrading performance.
- 5°-15° beam spread standard.
- 1500° surge protection standard.
- System power factor >90% and THD <20%.
- Operating temperature: -30°C to 40°C (-22°F to 104°F).

Warranty

- Backed by US LED's industry leading Ten-Year Warranty.

Product Performance Summary

Lumen Output	Up to 40,000 lumens
Efficacy	Up to 150 LPW
CRI	> 70 CRI
Available CCT	3000K, 4000K & 5000K
Warranty	Ten-Year Warranty

Product Overview

The DoradoXLE Plus delivers an outstanding and cost-effective performance by effectively combining outstanding photometric performance and long-lasting quality. It's designed to provide a superior one-to-one solution for replacing existing legacy lighting technology. With lumen packages ranging up to 40,000 lumens and multiple mounting options available, the DoradoXLE Plus can be a complete lighting solution for any outdoor application.

Product Applications

- Retail/Floor Areas
- Parking Lots
- Educational Facilities
- Industrial Facilities
- Business Campuses
- Security Areas
- Recreational Areas
- Site/Follow Areas

Product Certifications/Approvals

- ETL Listed for US & Canada.
- Compliant with UL 1598 and CSA C22.2.
- QLED Premium Listed.
- QLED Premium Listed.
- IP65 Rated Enclosure.
- RoHS Compliant.

Ordering Information

Size	Mount	CCT	Input Voltage	Beam	Finish	Accessories	Product Code
100	100W	30	120V/277V	5°	Standard	None	QDXLE2
150	150W	30	120V/277V	5°	Standard	None	QDXLE3
200	200W	30	120V/277V	5°	Standard	None	QDXLE4
300	300W	30	120V/277V	5°	Standard	None	QDXLE5

POLE MOUNTED LIGHT FIXTURE SPEC. QDXLE2

USLED
Always the Right Choice!

QubePAK® Regal 3
Architectural Outdoor LED Wall Pack

Key Features

- Modern LED replacement for traditional incandescent lighting.
- Elegant yet rugged construction effectively integrates with existing architecture.
- Adjustable, full-cutoff design with a 15° beam spread that allows for precise aiming.
- Night sky friendly; minimizes light pollution and glare.

Construction

- Rugged die-cast aluminum housing protects integral components from harsh environments and optimizes thermal management.
- Housing is protected by a corrosion resistant powder coat finish.
- IP65 rated enclosure prevents intrusion from environmental elements that could degrade performance.

Optics

- Type II or Type IV optical distribution.
- Industry-leading LEDs with 3000K, 4000K, and 5000K CCT (minimum 70 CRI).
- Lumen Maintenance: 100,000 hours (L70 > 104°F).

Warranty

- Backed by US LED's industry leading Ten-Year Warranty.

Product Performance Summary

Lumen Output	Up to 14,000 lumens
Efficacy	Up to 140 LPW
CRI	> 70 CRI
Available CCT	3000K, 4000K & 5000K
Warranty	Ten-Year Warranty

Product Overview

The QubePAK Regal 3 LED wall pack is designed to easily integrate into any existing architecture and provide superior illumination. With two optical distributions, the QubePAK Regal 3 provides a complete site-wide solution for commercial exterior applications. Its elegant aesthetics combined with first-class performance make it a popular choice with specifiers and lighting designers.

Product Applications

- Perimeter Areas
- Educational Facilities
- Building Entrances
- Industrial Facilities
- Security Lighting
- Retail Entrances
- Parking Lots
- General Lighting

Product Certifications/Approvals

- UL Listed
- Compliant with UL 1598 and CSA C22.2
- ETL Listed
- Suitable for Wet Locations
- IP65 Rated Enclosure
- RoHS Compliant

Ordering Information

WPR3	Input Voltage	Power	Output	CCT	Beam	Accessories
WPR3	120-277V	37	37W	30	5°	None
WPR3	120-277V	58	58W	30	5°	None
WPR3	120-277V	100	100W	30	5°	None

POLE MOUNTED LIGHT FIXTURE SPEC. WPR3

PLAN KEYED NOTES

EMING DOOR BUZZER - YORK MDL #TA725 OR EQUAL.

DOOR SCOPE - BASS SECURITY, REFER TO SHEET A4.0.

TER STRIP & LOW PROFILE THRESHOLD - REFER TO SHEET A4.0.

PE FLOOR FOR DESIGNATED AREA TO BE KEPT CLEAR OF STOCKED DS (PAINT YELLOW). PAINT BORDER.

L HYDRANT, REFER TO PLUMBING PLAN FOR MOUNTING HEIGHT.

? HINGED STEEL ACCESS PANEL (P-1) BY GENERAL CONTRACTOR FOR BING SHUT-OFF VALVE. COORDINATE LOCATION W/ PLUMBING CONTRACTOR. VALVES ARE TO BE LABELED AND FULLY ACCESSIBLE.

ICAL EXTERIOR WALL CONSTRUCTION:
TYLER COMMERCIAL D' BUILDING WRAP ON 7/16" OSB SHEATHING
BOTTOM 2'-0" OF EXTERIOR SHEATHING TO BE 3/4" PRESSURE
TREATED PLYWOOD.) ON 2x6 STUDS AT 16"o.c., FILL STUD CAVITY
WITH R-21 5 1/2" H-PERFORMANCE KRAFT FACED BATT INSULATION.
(NOTE: SHEATHING JOINT TO BE AT FIRE BLOCKING AT 2'-0" AND
10'-0" A.F.F.)

7" HIGH SHADOW BOX WOOD FENCE TO SCREEN HVAC UNITS. COLOR - WHITE

UND MOUNTED HVAC UNIT, REFER TO SHEET M1 FOR ADDITION INFORMATION.

CRETE SLAB, REFER TO SHEET A7 FOR CONCRETE SPECIFICATION. OVER
PACTED BASE, REFER TO SHEETS ST10 AND A3 FOR ADDITIONAL
RMATION. TYPICAL. PROVIDE CONTROL JOINTS AS SHOWN ON SHEET A8.

EL COLUMN, REFER TO FRAMING PLAN SHEET ST11. PAINT SW7005 PURE
E. WRAP COLUMN WITH TIGHT LOOP CARPET (BLACK) 48" HIGH AT BASE.
R AREA AT BASE OF COLUMNS, WITHIN THE CONSTRUCTION JOINTS, TO BE
TED BLACK MAGIC TINT.

TRACTOR SHALL LEAVE AN AS-BUILT SET OF CONSTRUCTION PLANS, ROLLED
PLACED IN A 4"x36" PVC PIPE, MOUNTED ABOVE THE DOOR AS SHOWN

R TO OFFICE ELEVATIONS DETAIL 16/A5 FOR ADDITIONAL INFORMATION.

7E CONCRETE SLAB 1/4" PER FOOT AWAY FROM BUILDING.

ON FINISH CONCRETE SIDEWALK - REFER TO SITE PLAN.

IZE STOREFRONT SYSTEM. REFER TO DRAWING A4.0 FOR ADDITIONAL
RMATION.

30" STEEL ATTIC ACCESS DOOR W/ INTEGRAL FRAME AND LATCH.
ATE PAST GABLE END WALL SPECIAL FRAMING.

OW PAINTED VERTICAL FACE OF CURB AND TOP OF CURB TO 6" IN
Y OUTSIDE EDGE, TYPICAL. FULL LENGTH OF CURB.

UE CORNER GUARDS. TOP INSTALLED @ 3'-5" A.F.F. BOTTOM
ALLED @ 4" A.F.F. ORDER TRIM KIT FOR THIS PROTOTYPE. BOTTOM
ALLED DIRECTLY ABOVE VINYL BASE.

ABC FIRE EXTINGUISHER MOUNTED ON WALL HOOK, NOT IN CABINET.
E PROVIDED AND INSTALLED BY DOLLAR GENERAL.

VIDE A TACTILE SIGN STATING 'EXIT' COMPLYING WITH ICC A117.1 AT
LOCATION INDICATED. MOUNT TOP OF SIGN 48" A.F.F.

WALL MOUNTED DOOR STOP.

ALLON WATER HEATER MOUNTED ON SHELF ABOVE MOP SINK.
F CONSTRUCTION: 3/4" PLYWOOD ON 2x6 STUDS AT 24"o.c.
R TO PLUMBING PLANS AND DETAIL 4/P2.

VIDE A SIGN STATING 'FIRE EXTINGUISHER INSIDE DOOR'.

IGERATION BY DOLLAR GENERAL. VERIFY LOCATION ON FIXTURE PLAN.

ED ALUMINUM SOFFIT. COLOR - WHITE. REFER TO EXTERIOR ELEVATIONS SHEET A2.

7HC UNISTRUT REFER TO SHEET A6 FOR ADDITIONAL INFORMATION.
TRICIAN TO INSTALL DURING FIXTURING. VERIFY FINAL LOCATION WITH
RE MANAGER.

AP COOLER/FREEZER AND DISPLAY LIGHTING AS NEEDED TO BE QUAD RECEPTACLE
UGH WHITE 30 CORO. CC TO LEAVE BOTTOM HANGING AT 80" A.F.F. (REFER TO
TRICAL). CORD ANCHORED TO WOOD BLOCKING IN CEILING ABOVE. COORDINATE
ITION WITH FINAL DOLLAR GENERAL FIXTURE PLAN. PAINT CONDUIT 'PURE WHITE.'
EDINATE LOCATION WITH FINAL DOLLAR GENERAL FIXTURE PLAN.

TRIC PANEL PROTECTION RAILING, McCUE MODEL CSSY-36E-KIT.

OF ROOF OVERHANG AND/OR BULKHEAD ABOVE, SHOWN DASHED.

: (2) PIPE SLEEVES THROUGH WALL. ONE 2" SLEEVE FOR PHONE
AND ONE 1" SLEEVE FOR IRRIGATION. SEAL ALL PENETRATIONS.

== TYPICAL SHEAR WALL CONSTRUCTION.
REFER TO FRAMING PLAN SHEET ST11 AND ST12.

STUDS W/ 5/8" GYPSUM BOARD BOTH SIDES WITH 1/2" WOOD CAP PAINTED TO MATCH.
R TO DETAIL THIS SHEET AND ROOM FINISH SCHEDULE SHEET A4.1 FOR WALL FINISHES.

L OR WOOD COLUMN IN STUD WALL FRAMING, REFER TO FRAMING PLAN SHEET ST11.

R TO JAMB DETAILS SHEET A4.0 FOR WALL FINISH AT EXTERIOR DOORS.

5'-0" OF 48" HIGH FRP

MOP HOLDER

MOP SINK

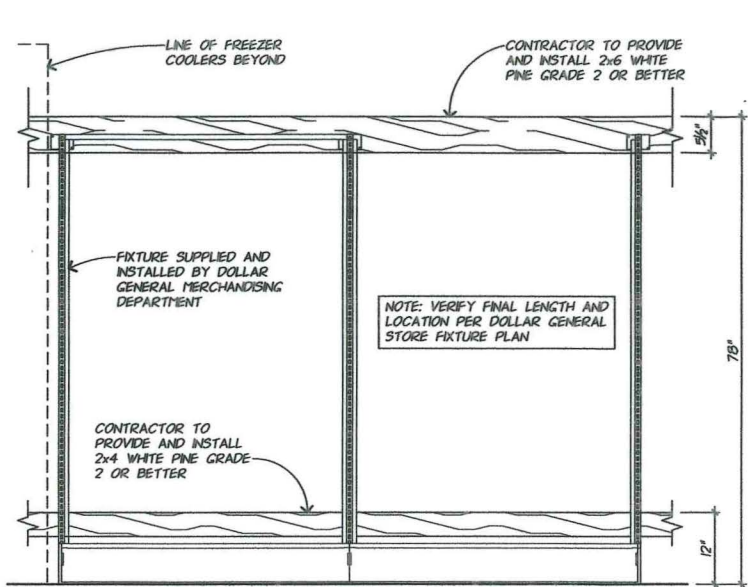
WATER HEATER 'EWH-1' ON ON
3'-0"x3'-0" TRIANGULAR SHAPED
SHELF ABOVE MOP SINK

FAUCET THIS WALL

3'-0" OF 48" HIGH FRP

NOTE:
REFER TO DETAIL 4/P2 FOR
ADDITIONAL INFORMATION.

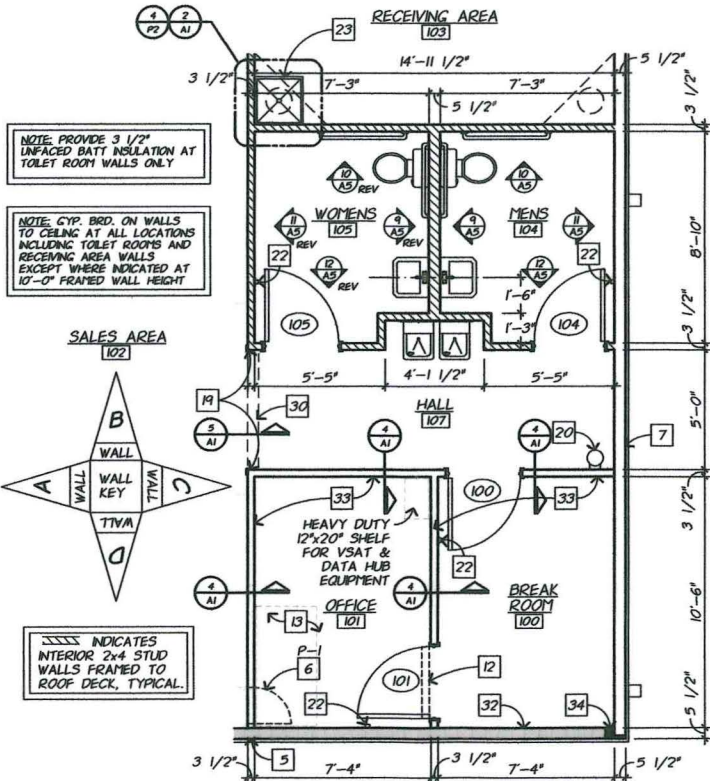
2 ENLARGED DETAIL



3 ANCHOR BOARD DETAIL
SCALE: 3/4"=1'-0"

ANCHOR BOARD NOTES:

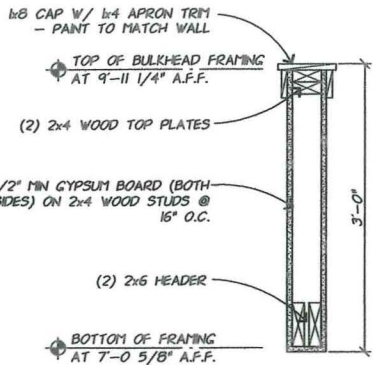
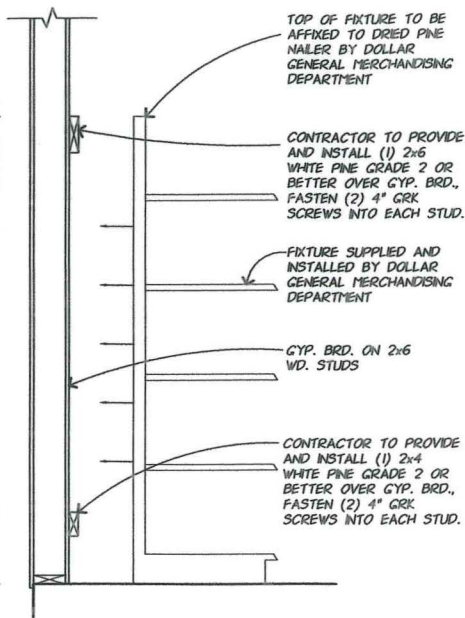
1. PROVIDE AND INSTALL 2x6 WHITE PINE - GRADE 2 OR BETTER.
2. PROVIDE AND INSTALL 2x4 WHITE PINE - GRADE 2 OR BETTER.
3. FASTEN THE 2x6 TO THE WALL WITH THE TOP EDGE OF THE BOARD AT 78" A.F.F.
4. FASTEN THE 2x4 TO THE WALL WITH THE TOP EDGE OF THE BOARD AT 12" A.F.F. REFER TO FIXTURE PLAN FOR LENGTH AND LOCATION OF
5. BOARD. PRE-DRILL PILOT HOLES IN ALL BOARDS PRIOR TO INSTALLATION TO PREVENT WOOD SPLITS.
6. FASTEN THE 2x6 WITH (2) 4" GRK SCREWS INTO EACH STUD.
7. FASTEN THE 2x6 WITH (2) 4" GRK SCREWS INTO EACH STUD.
8. PRIME AND PAINT BOTH BOARDS TO MATCH WALL COLOR.



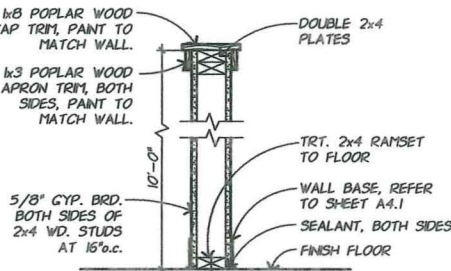
1 ENLARGED FLOOR PLAN
SCALE: 1/4"=1'-0"

GENERAL NOTES:

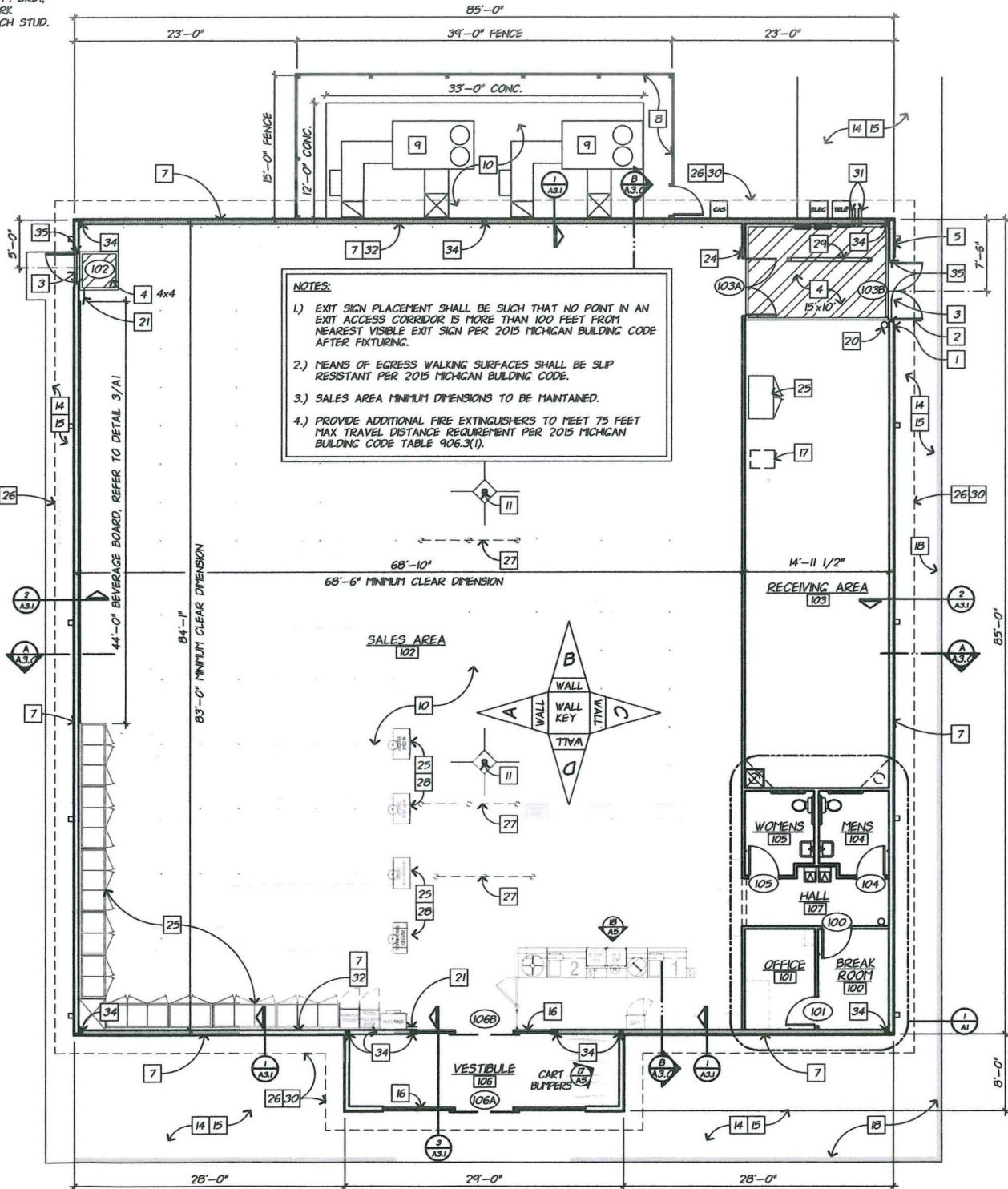
- 1.) DIMENSIONS ARE ROUGH FRAMING. FACE OF STUD TO FACE OF STUD.



5 BULKHEAD DETAIL
SCALE: 1"=1'-0"



4 WALL SECTION
SCALE: 1"=1'-0"



DOLLAR GENERAL
1 LONG LAKE TOWNSHIP, MICHIGAN



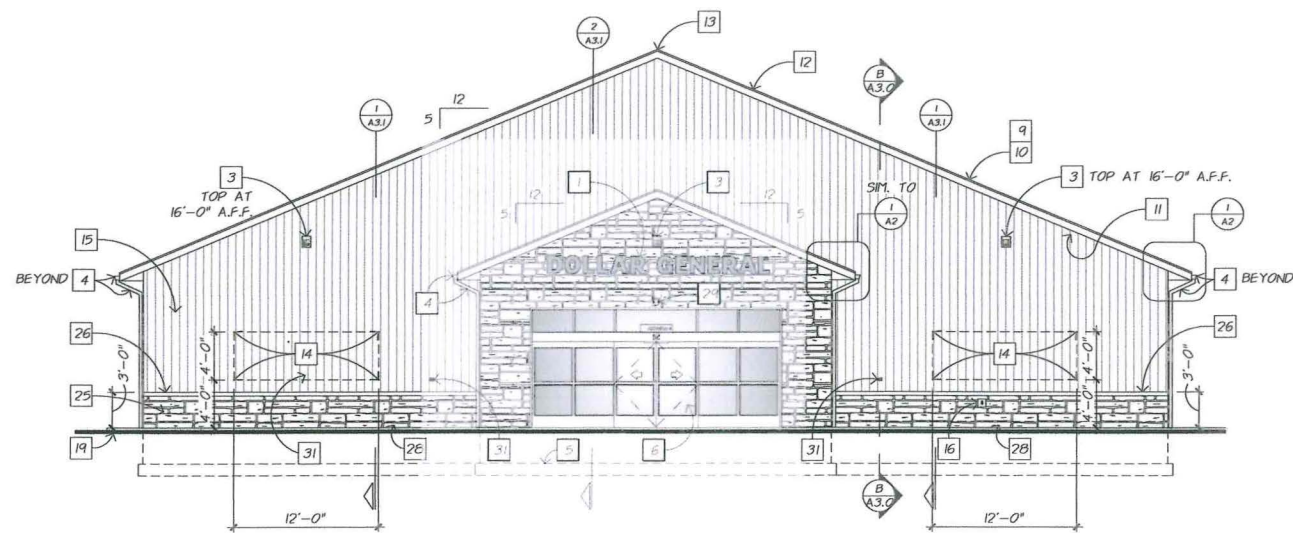
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6-30-23

1423

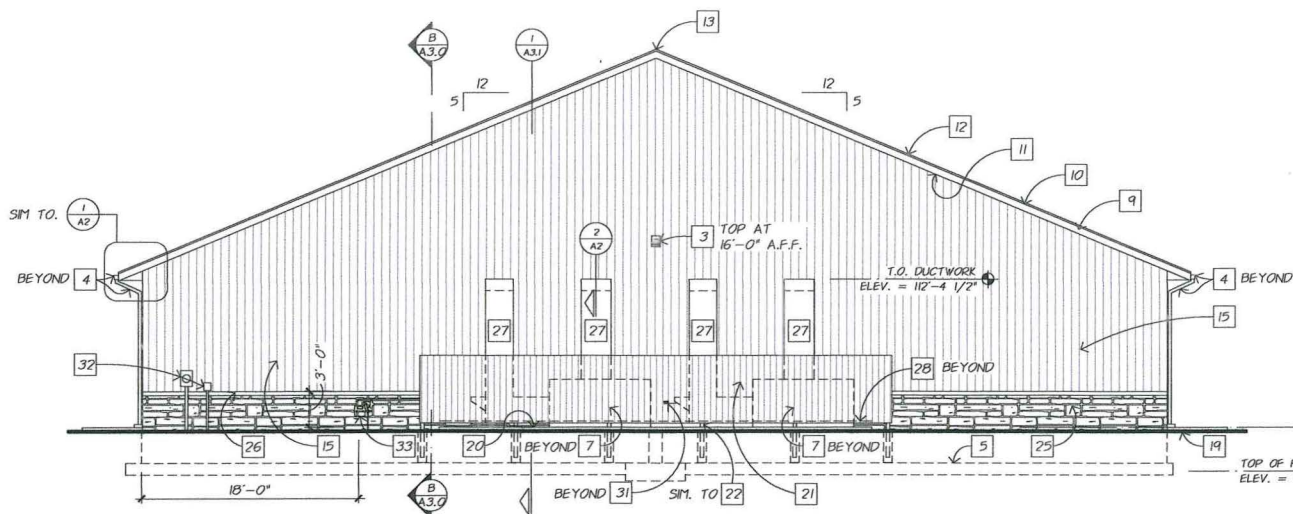
A1
Floor Plan

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their written consent. ©

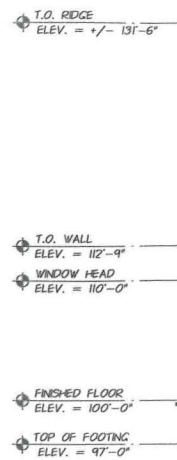
101 Washington Av
Grand Haven



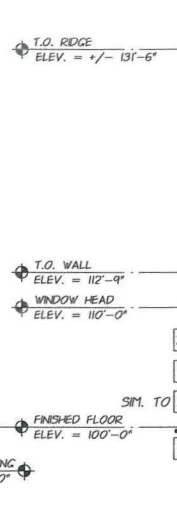
EAST ELEVATION
SCALE: 1/8"=1'-0"



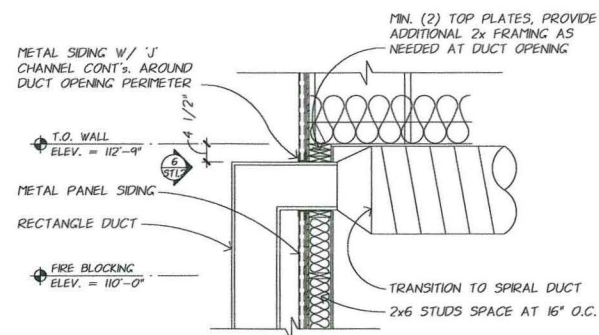
WEST ELEVATION
SCALE: 1/8"=1'-0"



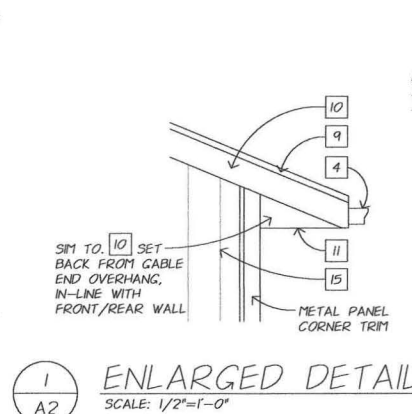
NORTH ELEVATION
SCALE: 1/8"=1'-0"



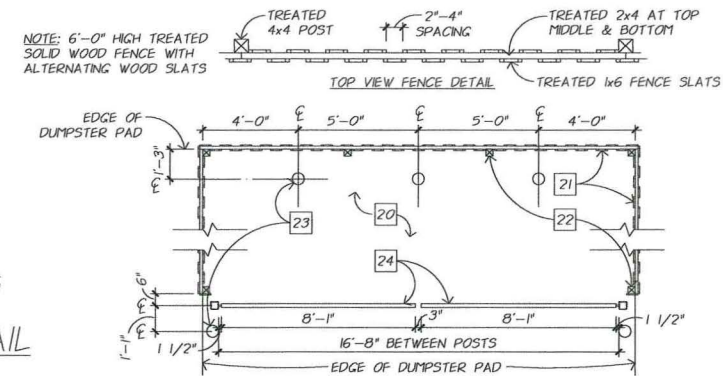
SOUTH ELEVATION
SCALE: 1/8"=1'-0"



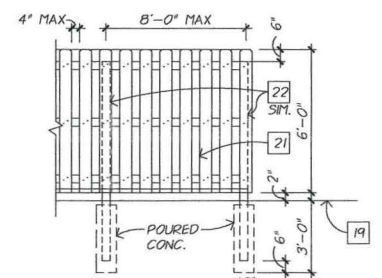
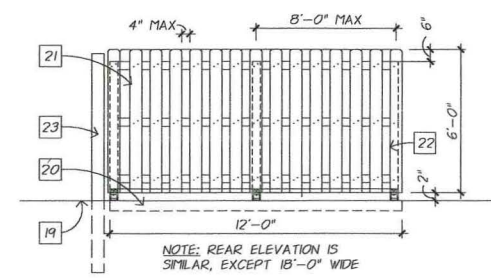
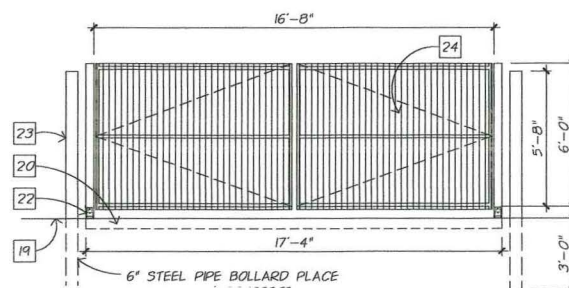
2 HVAC DUCT FRAMING SECTION
SCALE: 1/2"=1'-0"



1 ENLARGED DETAIL
SCALE: 1/2"=1'-0"



DUMPSTER ENCLOSURE PLAN VIEW
SCALE: 1/4"=1'-0"



EXTERIOR ELEVATION KEYED NOTES

- SIGN FURNISHED AND INSTALLED BY DOLLAR GENERAL CORP. WITH CIRCUIT AS NOTED ON ELECTRICAL PLAN. SIGN TO BE CENTERED ON FRONT OF BUILDING. CONTRACTOR IS TO PROVIDE ADEQUATE BLOCKING AS REQUIRED BY SIGN MANUFACTURER TO SUPPORT SIGN WEIGHT OF UP TO 1400 LBS. EXTERIOR CANOPY SIGN SHALL BE SUPPORTED BY THE FACE OF CANOPY. COORDINATE THE PROPER SIGNAGE TO BE USED WITH DOLLAR GENERAL.
- HOLLOW METAL DOOR AND FRAME - REFER TO DOOR SCHEDULE FOR ADDITIONAL DETAIL.
- LED WALL PACK LIGHT FIXTURE. TOP OF FIXTURE AT 12'-4" A.F.F. U.N.O.
- PRE-FINISHED METAL GUTTER AND DOWNSPOUT. GUTTER COLOR - WHITE. DOWNSPOUT COLOR - SANDSTONE.
- CONCRETE FOUNDATION / FOOTING PROFILE.
- 21x10" ALUMINUM BI-PART DOOR AND STOREFRONT GLAZING SYSTEM, WITH TEMPERED GLASS. ALUMINUM COLOR - BRONZE.
- HVAC UNITS - SEE HVAC PLAN M1 FOR ADDITIONAL INFORMATION.
- TWO VENTS IN WALL FOR BATHROOM EXHAUST. REFER TO MECHANICAL DRAWING SHEET M1. PAINT TO MATCH ADJACENT WALL.
- PRE-FINISHED METAL DRIP EDGE BY ROOFING CONTRACTOR. COLOR - WHITE.
- 1x8 ALUMINUM WRAPPED FASCIA ON 2x6 SUB-FASCIA. COLOR - WHITE.
- HIDDEN VENT, ALUMINUM SOFFIT. COLOR - WHITE.
- CERTAINTED LANDMARK WEATHERED WOOD SHINGLES OVER SYNTHETIC UNDERLAYMENT, PROVIDE ICE + WATER SHIELD FIRST 6'-0" UP RAKE FROM EAVE.
- SHINGLE OVER RIDGE VENT.
- (4) 1/2" DIA. x 6" LONG STAINLESS STEEL EYEBOLTS (CLOSED) WITH 1" DIA. OPENINGS. PROVIDE 3 1/2" THICK SOLID BLOCKING AT EACH EYEBOLT LOCATIONS.

- OUTSIDE AIR TEMP. SENSOR MOUNTED OVER RECEIVING DOORS @ 9' A.F.F.
- FINISHED GRADE AT EXTERIOR WALLS SHALL BE A MINIMUM OF 8" BELOW FINISHED FLOOR AT ALL NON-PAVED AREAS.
- 6" CONCRETE SLAB AT DUMPSTER ENCLOSURE AND HVAC EQUIPMENT.
- 6'-0" HIGH TREATED WOOD ALTERNATING SLAT PRIVACY FENCE.
- 4"x4" P.T. WOOD SUPPORT POSTS SECURED TO CONCRETE SLAB W/ SIMPSON ABU44Z.
- 6" DIA. CONCRETE FILLED STEEL BUMP POST W/ YELLOW PLASTIC COVER.
- CHAIN LINK FENCE GATE WITH DARK BROWN VINYL PRIVACY SLATS.
- THIN STONE VENEER, PROVIA, PREVISIONFIT. COLOR - SAGE GREY. (OR EQUAL).
- PRE-FINISHED METAL FLASHING BY SIDING CONTRACTOR AT #25 AND #15 INTERSECTION. SEE DETAIL 12/A3.2 FOR MORE INFORMATION. COLOR - TO MATCH SIDING COLOR.
- HVAC DUCTWORK. PAINT TO MATCH 15 AT ADJACENT WALL.
- PRE-FINISHED METAL FLASHING BY SIDING CONTRACTOR AT BASE OF WALL, REFER TO DETAIL 11/A3.1 FOR MORE INFORMATION. COLOR - DARK BRONZE.
- HEAT TRACE CONTROLS MOUNTED TO WALL AT 12'-0" A.F.F.
- EMERGENCY LIGHT HEAD. REFER TO SHEET E2 FOR ADDITIONAL INFORMATION.
- RECEPTACLE. REFER TO SHEET E1 FOR ADDITIONAL INFORMATION.
- ELECTRIC/PHONE EQUIPMENT, REFER TO ELECTRICAL DRAWINGS.
- GAS METER, REFER TO CIVIL DRAWINGS.

DOLLAR GENERAL



Bid + Permit
6-30-23

1423

A2
Exterior Elevations sheet

This drawing is to be used or revised only by the original author or their authorized representative.

101 W
Grand
Michigan
49417

MEMORANDUM

LONG LAKE TOWNSHIP PLANNING DEPARTMENT

TO: Long Lake Township Planning Commission

FROM: Leslie Sickterman, Township Planner

DATE: August 17, 2023

RE: Site Plan Review (SPR 08-23-07) by Applicant Midwest V, LLC and Owner Addison and Bonny Wheelock Trusts

PROPOSAL AND BACKGROUND

The subject property is located at the southeast corner of Section 17 of the Township in the General Business district. The parcel under consideration is 3 acres of a 9.3-acre parcel currently in use as a welding and sandblasting business. The proposed parcel is approximately 2.44 acres net of road right-of-way with approximately 775 feet of total frontage on the North Long Lake Road. This includes the curve on North Long Lake Road such that this is effectively a corner lot with approximately 250 feet on the north-south portion of North Long Lake Road, and the remainder frontage on the east-west portion of North Long Lake Road.

The 3-acre site is currently undeveloped. The parcel is treed but is not identified as part of a priority natural area. The land slopes from a high point along the north central property line approximately 20' southward and eastward to North Long Lake Road. There is an existing overhead line running north-south through the property and along a portion of the proposed north property line and along a portion of the North Long Lake Road right-of-way running east-west. The overhead line is centered within a 30' wide electric easement. The applicant is proposing to retain the lines and existing poles in their current locations.

The applicant proposes to develop a 7,457 square foot retail building, indicated to be a Dollar General store, along with a 29-stall parking lot and two driveways.

Retail uses in buildings less than 7,500 square feet are a use allowed by right in the General Business zoning district. No public hearing is required. The site is also located within an area designated as a Village Center in the Township Master Plan.

REVIEW CRITERIA

Staff has reviewed the proposal based on Section 24.05, Standards for Granting Site Plan Approval and other provisions of the Long Lake Township zoning ordinance and based on accepted planning standards. General comments are included below.

1. **Required Information** Section 24.3 Data Required for Site Plans lists all information required with a site plan. The plans are well prepared and quite complete. No required information is missing.

2. Parking & Site Circulation

The applicant has provided 29 parking spaces to accommodate employees and customers. The zoning ordinance requires 1 parking space per 300 square feet of floor area. Based on this standard, the applicant has calculated that they require 25 parking spaces and are proposing 29. Generally, it is preferred to have no more parking than required in order to lessen impervious surface area. The applicant should address their parking needs based on similarly sized Dollar General stores and whether all of this parking is needed. A cursory look at area Dollar General stores seems to indicate that many of them have less than 30 parking spaces. Parking must be located outside of the required setbacks. This standard is met on the submitted plans.

Section 25.5 of the zoning ordinance requires 2 loading spaces for a building of this size (minimum 25' x 12'). There is no proposed loading dock. The applicant proposes two loading spaces behind the building along the driveway running along the north side of the site. This will allow for shipments to be loaded into doors on the north side of the building. These loading spaces are outside of the driveway and away from the proposed north parking area to avoid conflicts with circulation around the building. This loading spaces should be clearly marked to indicate that the area is for loading only and not for parking. The applicant should address loading times; this is usually done during non-peak hours to avoid conflicts. The applicant should also address whether there will be any lift or other equipment outside to aid in product unloading.

The overall layout of the parking lot and driveways will allow for adequate circulation of vehicles. The applicant has been working with the Grand Traverse County Road Commission to obtain preliminary approval of the two driveways, their locations, and the design of each. The proposed northeast driveway will have one lane for incoming traffic and one shared lane for those exiting the site – either turning left or right. The southwest driveway will have separate lanes for those turning left and right from the site as well as one lane for those entering here. In addition, there is ample stacking/queuing space for vehicles waiting to exit from either proposed driveway.

3. Traffic Impacts

The applicant has provided the results of a traffic analysis prepared by Timothy Likens of Fishbeck. This analysis suggests that the use will generate 50 peak hour trips in the afternoon and 23 in the morning peak hour. The analysis assumes that the roughly a third of the afternoon peak trips will result from drive by traffic that would be passing by regardless of the existence of a retail store at this location. The analysis concludes that nearby intersections will continue to operate at a level of service A or B with the addition of this use; that the two proposed driveways will operate at a level of service of B or greater; and that 2 or fewer vehicles will queue at each driveway during peak hours.

4. Screening and Display

The applicant proposes to seed the areas surrounding the building with grass and wildflowers. Given that the site is located within one of the Township's planned Village Centers, the prominence of this site, and the effective height of the building (the finished floor elevation will be approximately 20 feet above the travel lanes and the peak of the building is approximately 32'), it is recommended that both the south side of the building and the area east of the front parking lot be planted with a mixture of evergreens and shrubs to soften the views of the building and to lessen the possible glare from the building-mounted and other site lights.

The applicant proposes a total of 18 evergreen trees and 18 shrubs to be planted within a 20-foot buffer area along the east property line. This is to comply with the requirement under Section 15.4.7 for screening along property lines adjacent to a residential zoning district. The only adjacent residential zoning district is the east property line. It is recommended that the irrigation be extended to this buffer area to keep these buffer plantings watered. If irrigation is not proposed here due to the location of the septic field, the applicant should address whether a drip irrigation system or some alternative means of watering this area can be used.

Outdoor display and sales are not permitted unless specifically approved by the Planning following conditional use review. No outdoor display or sales are proposed; therefore, any approval should include a prohibition of these elements.

5. Building Design

As noted above, this site is located within one of the designated Village Centers. Commercial uses within the Village Center areas are expected to be “attractively designed to fit the Township’s rural character”. The proposed building will have ribbed metal wall panels and limited stone veneer treatment around the perimeter of the building and the entrance vestibule. There are no other building details to break up the visual expanse of the building. When the same applicant was proposing to develop a building for the same retailer elsewhere in the Township, the building design included siding, more trim, additional window features, and even a rooftop cupola. Both locations are within planned Village Centers and the same site and building design expectations exist equally. The site design results in a large expanse of pavement in front of the store with no building perimeter plantings. Many similar style stores achieve a more softened and neighborhood feel by adding large planters in front of the building. This or another solution should be discussed by the Planning Commission and the applicant. Site plan review standards require conformance with the goals, policies, and objectives of the Master Plan. Staff recommends that the applicant revise the building and landscaping designs to better meet the expectations for a key location within a planned Village Center area.

6. Storm Drainage

A storm drainage plan and utilities details have been submitted for review. The plans call for two storm water drainage basins - one on the east and one of the southwest portions of the site. Storm water will be collected from the building downspouts, and from three catch basins within the parking lot and the driveways. The Township’s engineer has reviewed the information provided and has prepared a written review expressing no concerns regarding the proposed storm water plans.

7. Lighting and Signage

The applicant has provided lighting details and an overall lighting plan including a photometric grid demonstrating where the site lighting will fall on the site. There is one pole-mounted light proposed along the west driveway and a total of 8 building-mounted lights proposed for the east and north sides of the building. The pole light will be mounted at 16’ above grade, the building-mounted lights are proposed to be affixed at a height of either 12’4” or 16’ above grade. These are below the maximum 20’ height allowed under the township’s lighting standards in Section 4.13 of the zoning ordinance. The applicant has not indicated whether additional low lights will be installed on the bollards in front of the customer entrance. It is expected that the proposed

wall sign will be internally lit and that the lights inside the building will emanate from glass front vestibule (approximately 200 square feet).

Overall, the lighting proposed meets minimum standards and is not excessive. However, the cumulative effect of this lighting in an area that is relatively dark and rural, especially given the differential in the grade for the building and the travel ways, may be considered excessive for area residents. It is recommended that the applicant (1) work with staff and any lighting consultants to ensure that the wattage and type of lighting proposed will be designed in such a way that it will provide needed lighting but not create glow or glare that may become a nuisance; and that (2) the applicant provide landscaping designed to soften the potential nuisance of the site lighting proposed.

All signs require land use permits that are issued administratively and are not subject of the site plan review process.

8. Hours of Operation and Site Maintenance

The applicant has not indicated the proposed hours of operation. It is recommended that hours of operation not extend beyond 9:00 pm.

Lastly, certain land uses and business types tend to have site maintenance issues: fast food restaurants and sometimes mini storage facilities have trash issues or other operational failings given the nature of these businesses. Likewise, dollar stores tend to have similar operational/maintenance issues. Many dollar stores are plagued by unkempt store fronts and deferred site maintenance. These are issues that staff recommends the Planning Commission and the applicant discuss. The concerns from the public regarding this proposed use are significant. If an enforceable and reasonable maintenance schedule can be adopted as part of any approval of this use, it may help to address public concerns.

STAFF RECOMMENDATION

Staff recommends deferring action on this application pending Planning Commission approval of the following:

1. Addition of robust landscaping to soften the impact of the building and related lighting, and to better fit into the planned Village Center area to be approved by the Planning Commission.
2. Upgrading of building materials to better reflect the goals and objectives expressed in the Master Plan for this high-profile location within the planned west Village Center area to be approved by the Planning Commission.
3. Maintenance schedule to be approved by the Planning Commission.

When the above issues have been resolved to the Planning Commission's satisfaction, staff recommends approval of SPR 08-23-07 with the following conditions:

4. Recommended hours of operation between 8:00 am and 9:00 pm.
5. No outdoor display or merchandising.
6. Administrative approval of the final lighting details.
7. Payment of any outstanding fees for outside review.
8. Subject to approval of the proposed land division.
9. Subject to approval by all outside agencies.

August 16, 2023

Ms. Leslie Sickterman
Long Lake Township Planner
8870 North Long Lake Road
Traverse City, Michigan 49685

RE: Proposed Retail Building, 9954 N Long Lake Road, Stormwater and SESC Review

Dear Leslie,

We are writing to you regarding the Dollar General project stormwater and soil erosion and sedimentation control (SESC) review. The project is located on parcel 28-08-017-016-02 on the northwest side of intersection of N Long Lake Road and W Long Lake Road, Traverse City, Grand Traverse County, Michigan. The project includes the following:

- Proposed 7,457 sf building,
- Proposed asphalt paved parking lot and concrete dumpster pad,
- Proposed septic tank and drain field,
- Proposed stormwater basins, and
- Two proposed driveways leading to the parcel.

The lot is served by N Long Lake Road on the south side of the property and by N Long Lake Road on the east side of the property. The site is approximately 3 acres in size that will be occupied by the proposed retail store. Existing trees will be removed as part of the project. The plan set includes the following sheets: C1.0, C1.1, C1.2, C1.3, C1.4, C5.1, C5.2, C5.3, C5.4, and C7.0 dated August 14, 2023. As requested, our office reviewed the set of design drawings prepared by Jozwiak Consulting. We offer the following comments to the Township for our stormwater and SESC review.

STORMWATER REVIEW

Site plan drawings for the project were reviewed in accordance with Grand Traverse County, "Soil Erosion, Sedimentation and Stormwater Runoff Control Ordinance" (Amended June 20, 2012) and according to best management practices in the industry. We offer the following comments:

- Two stormwater basins are proposed to accommodate drainage from the post-developed area. The basins were designed to accommodate a 25-year storm with overflows to county Right of Way ditching which appears appropriate for the project.
- Stormwater is generally conveyed by sheeting across asphalt paved areas, along concrete curb in certain areas, collected in stormwater catch basins, conveyed in below-grade stormwater pipes, and directed to basins.
- Stormwater from the roof is collected in gutters and downspouts and connected to the stormwater collection system.
- Calculations incorporate soil types, land use/land cover, the associated curve numbers, and the runoff amounts.

- An infiltration rate of 0.5 inch/hour was used at Basin #1 and a rate of 10.0 inch/hour was used at Basin #2 to credit infiltration volume. We understand these infiltration rates were based on lab test results of onsite soil for each basin location.
 - The infiltration rate used to size the storm basin appears to be appropriate for the lab results that were obtained at 1.1 inch/hour and 48.8 inch/hour for Basin #1 and Basin #2 respectively.
- The stormwater basins and calculations proposed for the project include the runoff for two districts that include this site and some of the site to the north.
- Based on the areas provided, soil, types, land use/land cover, and the associated curve numbers, the runoff amounts and required basin volumes as presented appear to be adequate.
- It is the responsibility of the Owner and Owner's consultant to comply with applicable laws, codes, and regulations.
- The Owner will need to apply for a permit through the Grand Traverse County Soil Erosion Control office, if necessary.

SOIL EROSION CONTROL AND SITE DESIGN

The Soil Erosion and Sedimentation Control (SESC) methods were reviewed in accordance with best management practices. The drawings indicate placement of 4 inches of topsoil, seeded, and mulched in all disturbed areas and guarantee established ground cover for one year after ground cover is established. There are areas onsite that are relatively steep (3H:1V to 2.5H:1V). Slopes 3H:1V or steeper are difficult to maintain and can result in erosion. We recommend site design accommodating slopes 3H:1V or flatter and to call out mulch blanket pinned in place in areas of 3H:1V.

Seeding with mulch blanket and/or matting is proposed for temporary and permanent support of the spillways at both storm basins. Restoration shall occur directly after final grading is complete to prevent further erosion. The SESC methods should be properly installed, maintained, and inspected at regular intervals (typically a minimum of once per week and within 24-hours of a precipitation event that results in a discharge from the site). The SESC scheduling and strategy should be reviewed before any construction begins. The proposed SESC narrative appears to meet best management practices.

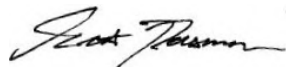
CONCLUSIONS

It is our opinion the design drawings provided by Jozwiak Consulting are acceptable and can be approved by the Township with the understanding of the following:

- Design consideration should be provided for slopes of 3H:1V or greater, plans amended, and mulch blanket added on side slopes if 3H:1V or greater, if necessary.
- Maintenance agreements comply with Township ordinances,
- Signage is labeled on the drawings and complies with Township ordinances,
- Final as-constructed drawings comply with Township ordinances, and

We are available to answer any questions you may have. Feel free to contact us at 231.932.8600 or by email at srasmussen@fveng.com.

Sincerely,
FLEIS & VANDENBRINK



Scott Rasmussen, PE
Project Manager

[https://fvops-my.sharepoint.com/personal/scottr_fveng_com/documents/desktop/106 - plan review - dollar general - 2023.docx](https://fvops-my.sharepoint.com/personal/scottr_fveng_com/documents/desktop/106-plan%20review-dollar%20general-2023.docx)

Memo

TO: Jared De Voursney – Westwind Construction

FROM: Timothy J. Likens, PE, PTOE

DATE: July 21, 2023

RE: Long Lake Township – Retail (Dollar General) TIA

PROJECT NO.: 231229

Introduction

Midwest V, LLC is proposing to develop a 7,457 square-foot retail store in Long Lake Township, Grand Traverse County, Michigan. The project site is located on the northwest quadrant of the N Long Lake Road and W Long Lake Road intersection. N Long Lake Road fronts both the south and east sides of the subject parcel, with W Long Lake Road intersecting the 90-degree turn in N Long Lake Road from the south. Two full-access driveways are proposed to service the site: one located at the west parcel line approximately 400 feet west of the intersection, and one at the north parcel line approximately 200 feet north of the intersection. The retail space will be occupied by a Dollar General store and is expected to be built and occupied in 2024.

The subject roadways are under jurisdiction of the Grand Traverse County Road Commission (GTCRC) and site plan review is under jurisdiction of Long Lake Township. Fishbeck has corresponded with GTCRC permits and traffic/safety engineers, and GTCRC has provided comment to the applicant regarding the proposed access plan. The scope of this Traffic Impact Assessment (TIA) was developed based on correspondence with GTCRC, review of the proposed site plan and adjacent road network, and professional experience. The purpose of this TIA is to evaluate site access operations and any potential impacts on the adjacent intersection. Fishbeck completed the following tasks to analyze traffic operations with and without the proposed development:

1. Collect weekday peak period turning movement count (TMC) data at the intersection of N Long Lake Road and W Long Lake Road. Data were collected on a typical weekday between the hours of 7:00 to 9:00 a.m. and 4:00 to 6:00 p.m.
2. Review available historical data provided by GTCRC in the vicinity of the site to determine if any adjustment for background traffic growth to the 2024 project buildout should be applied.
3. Forecast trips for the proposed Dollar General using Institute of Transportation Engineers (ITE) *Trip Generation, 11th Edition*.
4. Utilize the traffic count data to determine directional traffic distribution patterns and peak hour turning movements at the proposed site driveways.
5. Model and analyze the intersection of N Long Lake Road and W Long Lake Road, and the proposed site driveways to N Long Lake Road using Synchro/SimTraffic analysis software based on Highway Capacity Manual (HCM) methodology.
6. Assign the site trips to the study network based on existing traffic patterns and calculate future vehicle delays, Levels of Service (LOS), and queues to compare the no-build and proposed build conditions.
7. Evaluate the MDOT right and left-turn lane warrant criteria for the proposed site driveways.
8. Calculate the expected queues on N Long Lake Road relative to W Long Lake Road and the proposed site driveways based on the results of SimTraffic simulations.

9. Review historical crash data obtained from the Michigan Traffic Crash Facts website, which references the Michigan State Police database, and assess any potential safety concerns.

The purpose of this memorandum is to outline the assumptions, methods, analysis, results, and recommendations of this TIA. All work was completed based on GTCRC standards and guidance, MDOT standards/guidance where local requirements are not specified, and methodologies published by ITE. Referenced data and calculations are attached.

No-Build Conditions (without Dollar General)

North Long Lake Road is a minor arterial with two lanes (one in either direction) and a speed limit of 55 miles per hour (mph). The SB approach of N Long Lake Road at W Long Lake Road also has a dedicated right-turn lane. The EB approach of N Long Lake Road at W Long Lake Road operates under STOP control, while the NB/SB approaches do not stop. The most recent available counts on N Long Lake Road in the site vicinity were collected by GTCRC in June 2014 approximately 1/2 mile west of the site. These counts indicate that N Long Lake Road carried approximately 2,700 vehicles per day at that time. The average weekday a.m. and p.m. peak hour volumes were 164 and 261 vehicle per hour, respectively, at that time. W Long Lake Road is a major collector with two lanes (one in either direction) and a speed limit of 55 mph. Historical traffic volume data for W Long Lake Road are not available in the vicinity of the site.

TMCs at the study intersection were taken on Tuesday, July 11, 2023 by Fishbeck subconsultant Gewalt Hamilton Associates (GHA). Given the rural context of this site and the location in northern Michigan in proximity to Traverse City, these counts are expected to reflect peak conditions on a typical summer weekday. The collected TMCs were evaluated to determine the a.m. and p.m. peak hour volumes at N Long Lake Road and W Long Lake Road. The current weekday a.m. and p.m. peak hour volumes on N Long Lake Road west of the site are 187 and 338 vehicles per hour, respectively. Comparison to the historical data from June 2014 provided by GTCRC indicate that peak hour traffic volumes on N Long Lake Road in the site vicinity have grown between 1.6% and 3.3% per year to 2023. Conservatively, a growth rate of 3.0% was applied to the 2023 TMC volumes to establish no-build conditions for the expected project opening year of 2024.

No-build intersection operations were calculated using Synchro based on methodologies published in the Highway Capacity Manual (HCM), 6th Edition as shown in Table 1. These results indicate that the intersection of N Long Lake Road and W Long Lake Road currently operates acceptably.

Table 1 – LOS Analysis for 2024 No-Build Conditions

Approach	LOS/Delay (sec/veh)	
	a.m. Peak Hour	p.m. Peak Hour
N Long Lake Road and W Long Lake Road (minor stop-controlled)		
EB N Long Lake Road	B 11.8	B 12.5
NB W Long Lake Road (left-turn)	A 7.4	A 8.5
SB N Long Lake Road	free movement	

Crash Analysis

Historical crash data for the most recent available five years (2018-2022) were obtained from the Michigan Traffic Crash Facts (MTCF) website, which references the Michigan State Police Database. Crashes were reviewed on N Long Lake Road within approximately 1/2 mile of the site between Old Barn Road and Edgewood Avenue. Crashes were reviewed on W Long Lake Road between N Long Lake Road and Mickey Lake Trail. During this five year period, 20 crashes occurred of various types on the subject roadways, as shown on Figure 1.

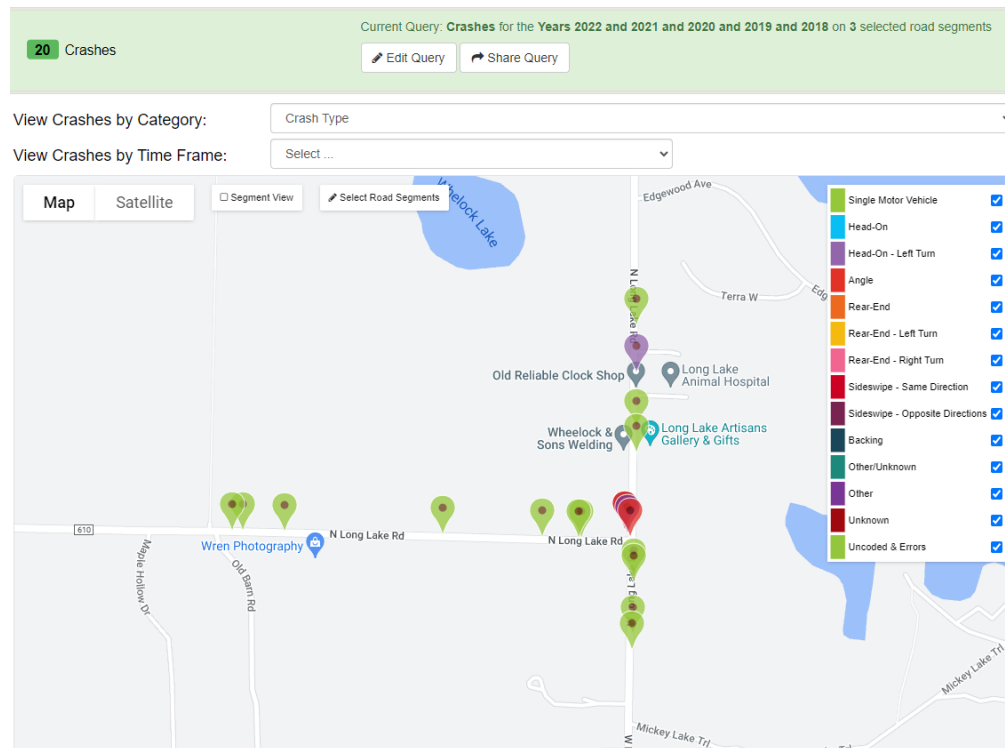


Figure 1 – N/W Long Lake Road Crash History (2018-2022)

Of the 20 recorded crashes, 14 (70%) were single motor vehicle, 9 involving deer. Of the 11 non-deer crashes, 5 were single motor vehicle, 3 were angle, 1 was head-on left-turn, 1 sideswipe (opposite directions), and 1 was coded as “other”. As shown on Figure 1, the multiple-vehicle crashes are concentrated at the intersection of N Long Lake Road and W Long Lake Road, while the single vehicle crashes tend to occur on the segments away from the intersection. Of the overall 20 reported crashes, 17 (85%) resulted in property damage only (PDO). These findings are consistent with the rural characteristics, traffic volumes, and intersection configuration.

Review of UD-10 crash reports indicates that 3 of 5 non-deer single motor vehicle crashes, 1 angle crash, and the 1 “other” crash involved ice/snow. The 6 remaining crashes that occurred in dry conditions indicate no correctable pattern of occurrence. Of these 6 crashes, 1 resulted in possible minor injury, and five resulted in property damage only (PDO). Of the 3 angle crashes that occurred, 2 resulted from an EB vehicle failing to yield to a SB vehicle at the stop-controlled intersection. The third angle crash and the “other” crash involved a SB vehicle losing control in icy conditions while turning right from SB to WB N Long Lake Road, striking an EB vehicle.

Of the 20 reported crashes, 1 resulted in fatality. This crash occurred at 6:21 p.m. on Friday, December 2, 2022 in dark/unlighted conditions. The crash involved a vehicle and pedestrian on SB W Long Lake Road approximately 500 feet north of Mickey Lake Road. Drugs and alcohol were contributing factors suspected of the driver, who reportedly fled the scene. The pedestrian suffered fatal injuries as a result of being struck.

Based on review of historical crash data, there is no evidence that road design features are contributing to crash occurrence. Crashes typically involved deer or snowy/icy conditions. The fatal vehicle/pedestrian crash involved a driver under the influence of alcohol/drugs who fled the scene.

Future Traffic Volumes (with Dollar General)

The volume of traffic that would be generated by the proposed retail store was forecast based on data published by the Institute of Transportation Engineers (ITE) in *Trip Generation, 11th Edition*. ITE land use code #814 Variety

Store was referenced as the most applicable to the proposed use. The ITE land use description describes “A variety store is a retail store that sells a broad range of inexpensive items often at a uniform price. A variety store is commonly referred to as a ‘dollar store.’” The ITE forecast for this use indicates the site will generate 23 a.m. peak hour trips (12 inbound, 11 outbound) and 50 p.m. peak hour trips (25 inbound, 25 outbound).

A portion of the site-generated trips are anticipated to be “pass-by” in nature, meaning that they already exist on the adjacent road network and are interrupted to visit the site. According to ITE methodology, new trips are assumed to return to their direction of origin whereas pass-by trips continue in their original direction of travel. The resultant ITE trip generation forecast based on p.m. pass-by rates is shown in Table 2. ITE does not publish a.m. pass-by rates for this land use; conservatively all trips during this time period were assumed to be new trips.

Table 2 – ITE Trip Generation Forecast

ITE Land Use	ITE Rate Description	Unit	Amount	A.M. Peak Hour			P.M. Peak Hour		
				In	Out	Total	In	Out	Total
814	Variety Store (Dollar General)	SF GFA	7,457	12	11	23	25	25	50
<i>Pass-by Trips (0% a.m., 34% p.m.)</i>				0	0	0	8	8	16
New Trips				12	11	23	17	17	34

MDOT Traffic and Safety published the current *Geometric Design Guidance* document in September 2017. This guidance includes operational and safety considerations for intersections and driveways. According to Section 1.2.5, TIAs are completed for uses which generate a relatively low volume of traffic. Furthermore, a TIA is required for any proposed development expected to generate between 50 and 99 directional trips. Recognizing that the document does provide the reviewing traffic/safety engineer discretion to require a TIA, the trip generation forecast above indicates that the proposed Dollar General does not meet the thresholds to typically require a TIA.

Peak hour volumes at the intersection of N Long Lake Road and W Long Lake Road were examined to determine directional traffic distribution patterns for site-generated traffic. Traffic directionality was applied to the Dollar General site traffic forecast to estimate the volume of traffic that would be added to the adjacent roadways as well as right- and left-turn volumes at the proposed site driveways. The traffic distribution model is outlined in Table 3.

Table 3 – Traffic Distribution Model

Direction (to/from)	Roadway	Percent
North	N Long Lake Road	45%
South	W Long Lake Road	30%
West	N Long Lake Road	25%
Total		100%

Turn Lane Warrants

GTCRC publishes driveway rules, specifications, and guidelines in the *GTCRC Right of Way Permitting and Public Road Standards (August 2016)*. More specifically, Part 6 of this document outlines driveway and private road design standards. This document does not provide GTCRC-specific turn lane warranting criteria; however, MDOT guidelines are referenced by GTCRC. Therefore, the MDOT warrants for right- and left-turn lanes, as well as passing flares for left turns, were evaluated for this study. MDOT warranting criteria for right- and left-turn treatments are outlined in the *Geometric Design Guidance (September 2017)* document.

The number of peak hour right and left turns at the site driveway were evaluated against MDOT right-turn, left-turn, and left-turn passing flare warranting criteria. The results indicate that no turn lanes, tapers, or passing flares are warranted at this location. The warrant graphs are attached to this memorandum.

Future Conditions (with Dollar General)

Future build intersection operations were calculated using Synchro based on methodologies published in the HCM and future traffic volume forecasts and distributions described above. The LOS and delay results for future conditions with Dollar General are shown in Table 4. These results indicate that the intersection of N Long Lake Road and W Long Lake Road will continue to operate acceptably with negligible changes in delay. The proposed Dollar General driveways are expected to operate in a similarly acceptable manner.

Table 4 – LOS Analysis for 2024 Build Conditions

Approach	LOS/Delay (sec/veh)			
	a.m. Peak Hour		p.m. Peak Hour	
N Long Lake Road and W Long Lake Road (minor stop-controlled)				
EB N Long Lake Road	B	11.9	B	12.7
NB W Long Lake Road (left-turn)	A	7.4	A	8.5
SB N Long Lake Road	free movement			
N Long Lake Road and West Site Driveway (minor stop-controlled)				
EB N Long Lake Road (left-turn)	A	7.3	A	7.8
WB N Long Lake Road	free movement			
SB Site Driveway	A	9.3	B	10.7
N Long Lake Road and North Site Driveway (minor stop-controlled)				
EB Site Driveway	A	9.9	B	12.1
NB N Long Lake Road (left-turn)	A	7.4	A	8.4
SB N Long Lake Road	free movement			

SimTraffic simulations were also run for the future a.m. and p.m. peak hour conditions to visually evaluate intersection operations and calculate vehicle queues. Specifically, queues on the proposed Dollar General driveways and queues between the study intersection and the proposed Dollar General driveways were calculated based on the average of five simulation runs per peak hour. The calculated average and 95th percentile queues are outlined in Table 5. This queue analysis indicates that adequate space is provided between the study intersection and the proposed site driveways. Opposing queues will not interlock, interrupt intersection operations, or block driveway ingress/egress.

Table 5 – 95th Percentile Queue Lengths for 2024 Future Conditions (feet)

Location	a.m. Peak Hour		p.m. Peak Hour	
	Average	95 th %	Average	95 th %
EB Site Driveway @ N Long Lake Road	6	25	12	38
NB N Long Lake Road @ Site Driveway	0	0	4	22
SB N Long Lake Road @ W Long Lake Road	0	0	1	10
SB Site Driveway @ N Long Lake Road	4	22	7	28
WB N Long Lake Road @ Site Driveway	0	0	0	0
EB N Long Lake Road @ W Long Lake Road	29	53	22	42

Conclusions

Based on the results of the data, analysis, and GTCRC/MDOT guidelines outlined herein, the proposed Dollar General would not have a significant impact on existing traffic operations. The proposed driveway locations at the north and west property lines would maximize spacing with respect to the intersection of N Long Lake Road and W Long Lake Road. The following provide points of support for this conclusion in summary of the details provided above:

1. The analyses conducted for this TIA were based on current peak summertime traffic counts and growth based on historical traffic volumes.
2. All movements at the intersection of N Long Lake Road and W Long Lake Road would continue to operate at a LOS B or better during peak hours.
3. All ingress/egress movements at the proposed site driveways would operate at an acceptable LOS B or better during peak hours.
4. No adverse queue interaction would exist on N Long Lake Road between the proposed driveways and the intersection with W Long Lake Road.
5. The 95th percentile queues on the proposed driveway approaches exiting the site onto N Long Lake Road would be 2 vehicles or less during peak hours.
6. Based on review of historical crash data, there is no evidence that road design features are contributing to crash occurrence.

Attachments: Traffic Volume Data
Historical Crash Data
Turn Lane Warrants
Synchro/SimTraffic Calculations

By email

Copy: Scott Jozwiak, PE – Jozwiak Consulting
Kyle Reidsma, PE, PTOE – Fishbeck
Asa de Vries, EIT – Fishbeck

N Long Lake and W Long Lake Road - TMC

Tue Jul 11, 2023

Full Length (7 AM-9 AM, 4 PM-6 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)

All Movements

ID: 1088256, Location: 44.731824, -85.776763

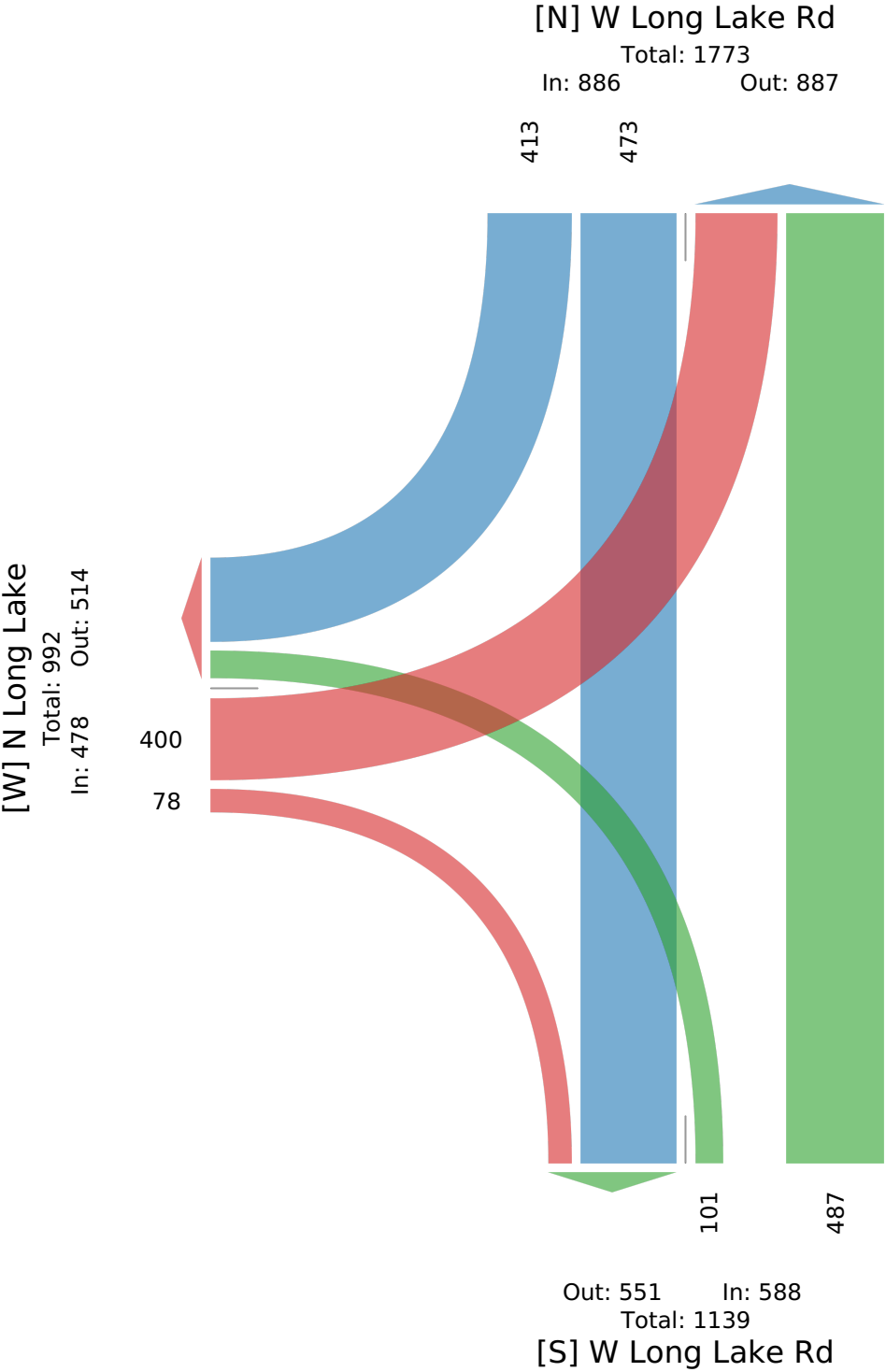


Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	N Long Lake Eastbound				W Long Lake Rd Northbound				W Long Lake Rd Southbound				
Time	L	R	U	App	L	T	U	App	T	R	U	App	Int
2023-07-11 7:00AM	29	3	0	32	2	28	0	30	12	3	0	15	77
7:15AM	35	4	0	39	2	41	0	43	9	7	0	16	98
7:30AM	46	6	0	52	2	47	0	49	11	8	0	19	120
7:45AM	36	1	0	37	1	49	0	50	9	7	0	16	103
Hourly Total	146	14	0	160	7	165	0	172	41	25	0	66	398
8:00AM	18	5	0	23	3	40	0	43	14	6	0	20	86
8:15AM	34	2	0	36	2	21	0	23	13	13	0	26	85
8:30AM	34	4	0	38	10	35	0	45	12	8	0	20	103
8:45AM	16	4	0	20	4	34	0	38	21	16	0	37	95
Hourly Total	102	15	0	117	19	130	0	149	60	43	0	103	369
4:00PM	18	8	0	26	8	22	0	30	42	36	0	78	134
4:15PM	26	3	0	29	6	25	0	31	35	36	0	71	131
4:30PM	21	4	0	25	8	21	0	29	44	30	0	74	128
4:45PM	10	4	0	14	12	22	0	34	56	58	0	114	162
Hourly Total	75	19	0	94	34	90	0	124	177	160	0	337	555
5:00PM	21	9	0	30	10	22	0	32	41	50	0	91	153
5:15PM	20	4	0	24	8	30	0	38	62	54	0	116	178
5:30PM	10	13	0	23	13	21	0	34	56	42	0	98	155
5:45PM	26	4	0	30	10	29	0	39	36	39	0	75	144
Hourly Total	77	30	0	107	41	102	0	143	195	185	0	380	630
Total	400	78	0	478	101	487	0	588	473	413	0	886	1952
% Approach	83.7%	16.3%	0%	-	17.2%	82.8%	0%	-	53.4%	46.6%	0%	-	-
% Total	20.5%	4.0%	0%	24.5%	5.2%	24.9%	0%	30.1%	24.2%	21.2%	0%	45.4%	-
Lights	397	74	0	471	96	485	0	581	468	409	0	877	1929
% Lights	99.3%	94.9%	0%	98.5%	95.0%	99.6%	0%	98.8%	98.9%	99.0%	0%	99.0%	98.8%
Articulated Trucks	0	0	0	0	0	0	0	0	1	1	0	2	2
% Articulated Trucks	0%	0%	0%	0%	0%	0%	0%	0%	0.2%	0.2%	0%	0.2%	0.1%
Buses and Single-Unit Trucks	3	4	0	7	5	2	0	7	4	3	0	7	21
% Buses and Single-Unit Trucks	0.8%	5.1%	0%	1.5%	5.0%	0.4%	0%	1.2%	0.8%	0.7%	0%	0.8%	1.1%

*L: Left, R: Right, T: Thru, U: U-Turn

N Long Lake and W Long Lake Road - TMC
Tue Jul 11, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1088256, Location: 44.731824, -85.776763



N Long Lake and W Long Lake Road - TMC

Tue Jul 11, 2023

AM Peak (7:15 AM - 8:15 AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)

All Movements

ID: 1088256, Location: 44.731824, -85.776763

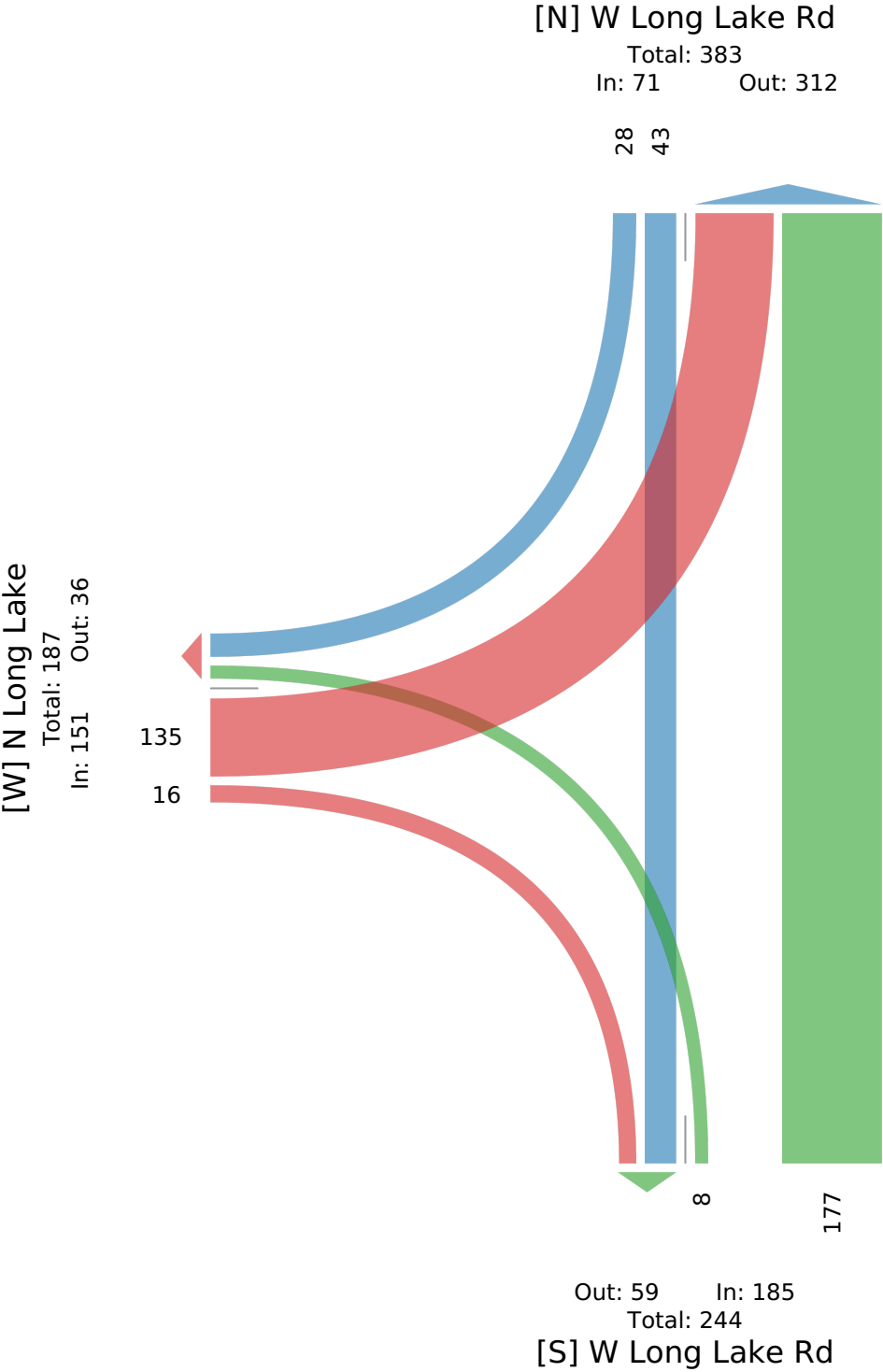


Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	N Long Lake Eastbound				W Long Lake Rd Northbound				W Long Lake Rd Southbound				
Time	L	R	U	App	L	T	U	App	T	R	U	App	Int
2023-07-11 7:15AM	35	4	0	39	2	41	0	43	9	7	0	16	98
7:30AM	46	6	0	52	2	47	0	49	11	8	0	19	120
7:45AM	36	1	0	37	1	49	0	50	9	7	0	16	103
8:00AM	18	5	0	23	3	40	0	43	14	6	0	20	86
Total	135	16	0	151	8	177	0	185	43	28	0	71	407
% Approach	89.4%	10.6%	0%	-	4.3%	95.7%	0%	-	60.6%	39.4%	0%	-	-
% Total	33.2%	3.9%	0%	37.1%	2.0%	43.5%	0%	45.5%	10.6%	6.9%	0%	17.4%	-
PHF	0.734	0.667	-	0.726	0.667	0.903	-	0.925	0.768	0.875	-	0.888	0.848
Lights	135	14	0	149	8	176	0	184	40	28	0	68	401
% Lights	100%	87.5%	0%	98.7%	100%	99.4%	0%	99.5%	93.0%	100%	0%	95.8%	98.5%
Articulated Trucks	0	0	0	0	0	0	0	0	1	0	0	1	1
% Articulated Trucks	0%	0%	0%	0%	0%	0%	0%	0%	2.3%	0%	0%	1.4%	0.2%
Buses and Single-Unit Trucks	0	2	0	2	0	1	0	1	2	0	0	2	5
% Buses and Single-Unit Trucks	0%	12.5%	0%	1.3%	0%	0.6%	0%	0.5%	4.7%	0%	0%	2.8%	1.2%

* L: Left, R: Right, T: Thru, U: U-Turn

N Long Lake and W Long Lake Road - TMC
Tue Jul 11, 2023
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1088256, Location: 44.731824, -85.776763



N Long Lake and W Long Lake Road - TMC

Tue Jul 11, 2023

PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)

All Movements

ID: 1088256, Location: 44.731824, -85.776763



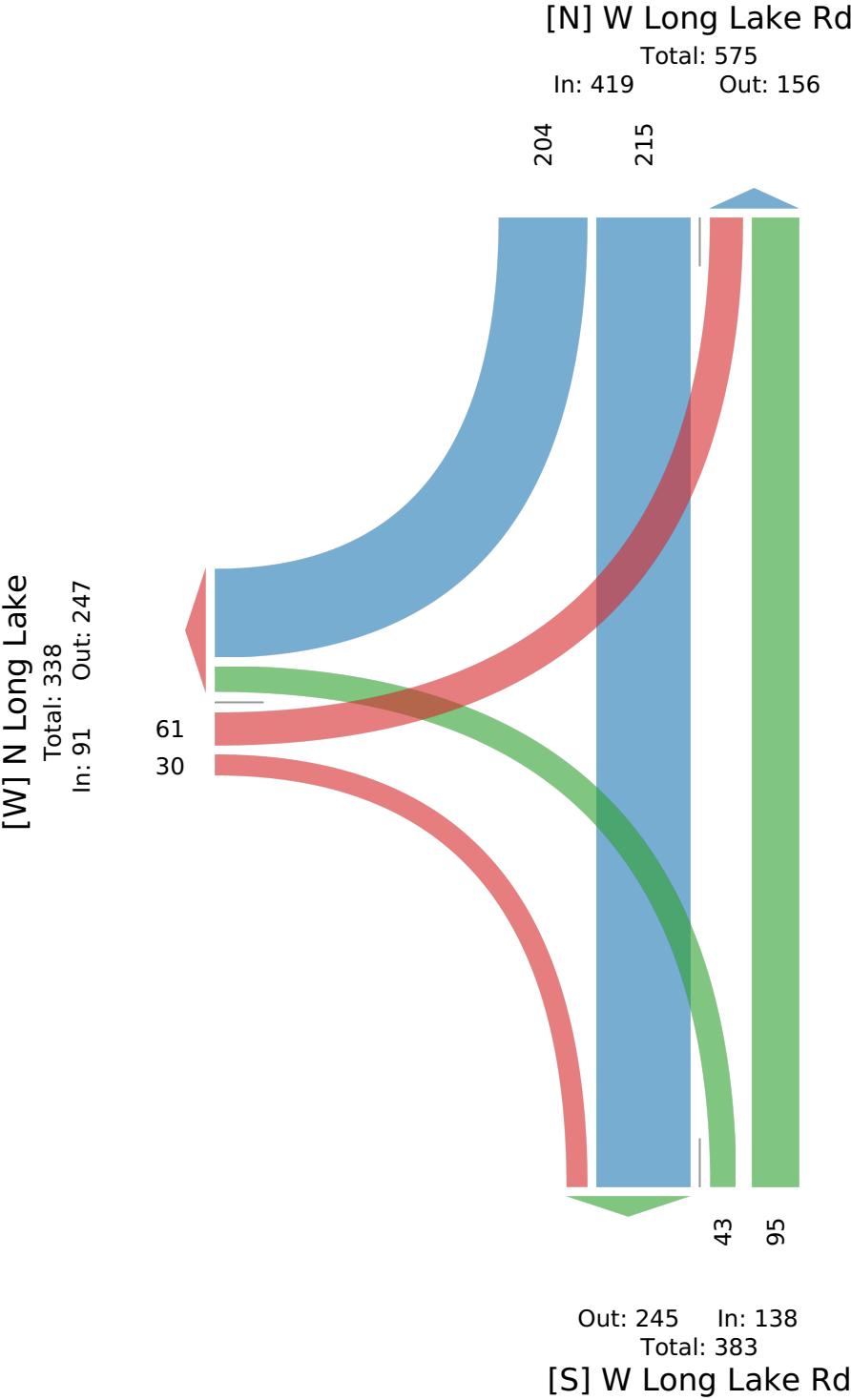
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Time	L	R	U	App	L	T	U	App	T	R	U	App	Int
2023-07-11 4:45PM	10	4	0	14	12	22	0	34	56	58	0	114	162
5:00PM	21	9	0	30	10	22	0	32	41	50	0	91	153
5:15PM	20	4	0	24	8	30	0	38	62	54	0	116	178
5:30PM	10	13	0	23	13	21	0	34	56	42	0	98	155
Total	61	30	0	91	43	95	0	138	215	204	0	419	648
% Approach	67.0%	33.0%	0%	-	31.2%	68.8%	0%	-	51.3%	48.7%	0%	-	-
% Total	9.4%	4.6%	0%	14.0%	6.6%	14.7%	0%	21.3%	33.2%	31.5%	0%	64.7%	-
PHF	0.726	0.577	-	0.758	0.827	0.792	-	0.908	0.867	0.879	-	0.903	0.910
Lights	61	30	0	91	43	95	0	138	214	204	0	418	647
% Lights	100%	100%	0%	100%	100%	100%	0%	100%	99.5%	100%	0%	99.8%	99.8%
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated Trucks	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Buses and Single-Unit Trucks	0	0	0	0	0	0	0	0	1	0	0	1	1
% Buses and Single-Unit Trucks	0%	0%	0%	0%	0%	0%	0%	0%	0.5%	0%	0%	0.2%	0.2%

* L: Left, R: Right, T: Thru, U: U-Turn

N Long Lake and W Long Lake Road - TMC
Tue Jul 11, 2023
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1088256, Location: 44.731824, -85.776763



Crashes for the Years 2022 and 2021 and 2020 and 2019 and 2018 on 3 selected road segments

Crash Type	Crash: Animal Type Involved/ Associated (2016+)	Worst Injury in Crash: Fatal Injury (K)	Worst Injury in Crash: Suspected Minor Injury (B)	Worst Injury in Crash: Possible Injury (C)	Worst Injury in Crash: No Injury (O)	Total
Single Motor Vehicle	Deer	0	1	0	8	9
Single Motor Vehicle	Uncoded & Errors	1	0	0	4	5
Head-On - Left Turn	Uncoded & Errors	0	0	1	0	1
Angle	Uncoded & Errors	0	0	0	3	3
Sideswipe - Opposite Directions	Uncoded & Errors	0	0	0	1	1
Other	Uncoded & Errors	0	0	0	1	1
Total Crash Count		1	1	1	17	20

Crashes for the Years 2022 and 2021 and 2020 and 2019 and 2018 on 3 selected road segments

Crash Type	Worst Injury in Crash: Fatal Injury (K)	Worst Injury in Crash: Suspected Minor Injury (B)	Worst Injury in Crash: Possible Injury (C)	Worst Injury in Crash: No Injury (O)	Total
Single Motor Vehicle	1	1	0	12	14
Head-On - Left Turn	0	0	1	0	1
Angle	0	0	0	3	3
Sideswipe - Opposite Directions	0	0	0	1	1
Other	0	0	0	1	1
Total Crash Count	1	1	1	17	20

Crashes for the Years 2022 and 2021 and 2020 and 2019 and 2018 on 3 selected road segments filtered by Crash: Animal Type Involved/Associated (2016+) (Uncoded & Errors)

Crash Type	Road Conditions	Worst Injury in Crash: Fatal Injury (K)	Worst Injury in Crash: Possible Injury (C)	Worst Injury in Crash: No Injury (O)	Total
Single Motor Vehicle	Dry	1	0	1	2
Head-On - Left Turn	Dry	0	1	0	1
Angle	Dry	0	0	2	2
Sideswipe - Opposite Directions	Dry	0	0	1	1
Single Motor Vehicle	Ice	0	0	1	1
Angle	Ice	0	0	1	1
Other	Ice	0	0	1	1
Single Motor Vehicle	Snow	0	0	2	2
Total Crash Count		1	1	9	11

Authority: 1949 PA 300, Sec.257-622
Compliance: Required MSP UD-10E
Penalty: \$100 and/or 90 days (Rev 11/2020)

External # 0147182
Crash ID 2775758

Page 01 of 01
File Class 54001

STATE OF MICHIGAN TRAFFIC CRASH REPORT

ORI MI 2812800		Department Name Grand Traverse Co Sheriff's Office				Incident # 20674-22					
Crash Date 12/02/2022		Crash Time 18:21	No. of Units 02	Crash Type Single Motor Vehicle	Special Circumstances <input type="radio"/> None <input type="radio"/> Fleeing Police <input checked="" type="radio"/> Hit and Run <input type="radio"/> Unknown <input type="radio"/> School Bus <input type="radio"/> Animal		Special Checks <input checked="" type="radio"/> Fatal <input type="radio"/> Non-Traffic Area <input type="radio"/> ORV/Snowmobile				
County 28 - Grand Traverse		Traffic Control None		Relation to Roadway On the Road		Weather Clear		Area NON-FRWY Straight Roadway			
City/Twsp 08 - Long Lake Twp		Contributing Circumstances 1st Unknown		2nd		Light Dark-Unlighted	Road Surface Condition Dry		Total Lanes 02	Speed Limit 55	Posted Yes
Work Zone (if applicable) Type Workers Present Activity Location											

LOCATION	Prefix W		Primary Road Name LONG LAKE		Road Type RD		Suffix		Divided Roadway	
	Distance / Direction 528 Feet N				Trafficway Not Physically Divided					
	Prefix		Intersecting Road Name MICKEY LAKE		Road Type TRL		Suffix		Divided Roadway	


UNIT / DRIVER	Unit Number 01	Unit Known Yes	State MI	Driver License Number #####	Date of Birth (Age) ###/###/#### (47)	License Type <input checked="" type="radio"/> Operator <input type="radio"/> Chauffeur <input type="radio"/> Moped	Endorsements <input type="radio"/> Cycle <input type="radio"/> Farm <input type="radio"/> Recreation	Sex M	Race W	Total Occupants 01	Hazardous Action Unknown	
	Unit Type MV	Driver Information ##### ##### TRAVERSE CITY, MI 49685 (###) ###-####				Driver is Owner Yes	Injury O	Position Front - Left		Restraint Restraint Use Unknown		
	Driver Condition at Time of Crash 1st Unknown				2nd		Driver Distracted By Unknown		Ejected	Trapped	Airbag Deployed Not Deployed	
	Hospital NONE		Ambulance NONE									
	Alcohol Suspected Yes	Contributing Factor Yes	Alcohol Test Type <input type="radio"/> Breath <input type="radio"/> Field <input checked="" type="radio"/> Blood <input type="radio"/> PBT <input type="radio"/> Urine <input type="radio"/> Refused <input type="radio"/> Not Offered			Alcohol Test Results <input checked="" type="radio"/> Pending		Test Results:		Interlock Device No		
	Drug Suspected Yes	Contributing Factor Yes	Drug Test Type <input checked="" type="radio"/> Blood <input type="radio"/> Field <input type="radio"/> Urine <input type="radio"/> Refused <input type="radio"/> Not Offered			Drug Test Results <input checked="" type="radio"/> Pending		Test Results:		Citation Issued <input type="radio"/> Hazardous <input type="radio"/> Other		
	Vehicle Registration BNL802		State MI	Vehicle Description 2019		Make HONDA		Model CR-V		Color SIL		
	VIN 5J6RW2H86KA021079		Vehicle Type Passenger Car, SUV, Van		Special Vehicles Not Applicable		Private Trailer Type		Vehicle Defect			
	Automation System(s) in Vehicle No		Automation System Level in Vehicle No Automation				Automation System Level Engaged at Time of Crash No Automation					
	Insurance Company #####			Insurance Policy # #####			Towed By			Towed To		

PASSENGERS	Passenger Information				Date of Birth (Age)	Sex	Race	Position	Restraint			
					Injury	Ejected	Trapped	Airbag Deployed				
	Hospital				Ambulance							
	Passenger Information				Date of Birth (Age)	Sex	Race	Position	Restraint			
					Injury	Ejected	Trapped	Airbag Deployed				
	Hospital				Ambulance							

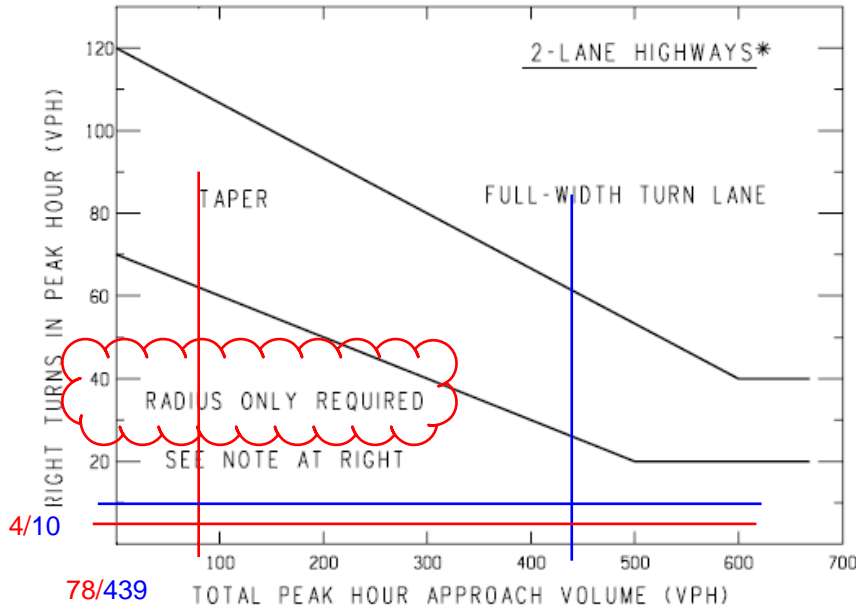
TRUCK / BUS	Carrier Information				USDOT		MC		MPSC		
					Driver's CDL Type		Endorsements OH OP OT ON OS OX		CDL Exempt <input type="radio"/> Farm <input type="radio"/> Other		
	GVWR/GCWR <input type="radio"/> 10,000 lbs. or Less <input type="radio"/> 10,001 - 26,000 lbs. <input type="radio"/> Greater than 26,000 lbs.		Vehicle Configuration		Cargo Body Type		Medical Card		Hazardous Material <input type="radio"/> Placard <input type="radio"/> Cargo Spill		ID #

OWNERS	Owner Information				Owner Information			

Damaged Property				Public	Owner & Phone			

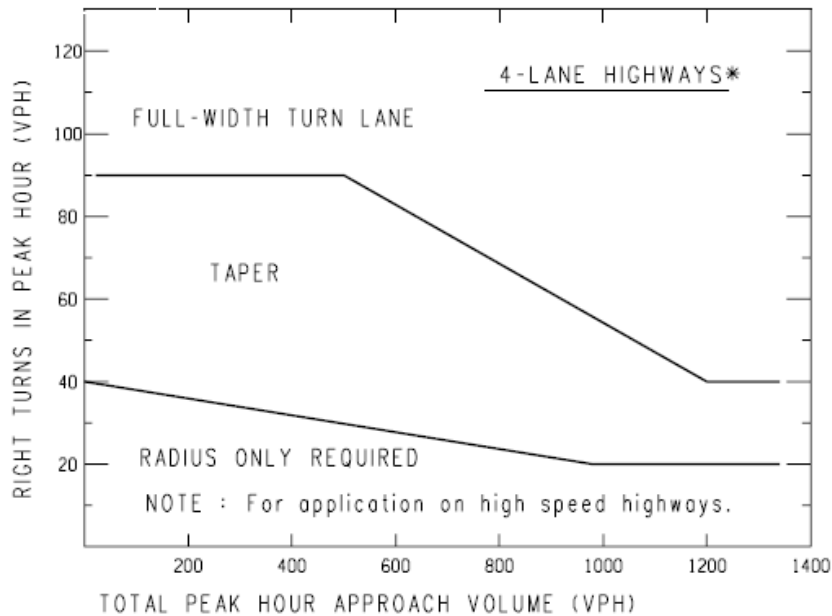
UNIT / DRIVER	Unit Number	02	Unit Known	Yes	State	MI	Driver License Number	#####	Date of Birth (Age)	###/###/#### (23)	License Type	<input type="radio"/> Operator <input type="radio"/> Chauffeur <input type="radio"/> Moped	Endorsements	<input type="radio"/> Cycle <input type="radio"/> Farm <input type="radio"/> Recreation	Sex	F	Race	W	Total Occupants	00	Hazardous Action	Unknown
	Unit Type	P	Driver Information ##### ##### TRAVERSE CITY, MI 49685 (###) ###-####								Driver is Owner	No	Injury	K	Position	Pedestrian	Restraint No Belts Available					
	Driver Condition at Time of Crash 1st Unknown								2nd				Driver Distracted By Unknown				Ejected		Trapped		Airbag Deployed Not Equipped	
	Hospital NONE										Ambulance NONE											
	Alcohol Suspected	No	Contributing Factor	No	Alcohol Test Type <input type="radio"/> Breath <input type="radio"/> Blood <input type="radio"/> Urine <input type="radio"/> Field <input type="radio"/> PBT <input type="radio"/> Refused <input checked="" type="radio"/> Not Offered				Alcohol Test Results <input type="radio"/> Pending Test Results:				Interlock Device No									
	Drug Suspected	No	Contributing Factor	No	Drug Test Type <input type="radio"/> Blood <input type="radio"/> Urine <input type="radio"/> Field <input type="radio"/> Refused <input checked="" type="radio"/> Not Offered				Drug Test Results <input type="radio"/> Pending Test Results:				Citation Issued <input type="radio"/> Hazardous <input type="radio"/> Other									
	Vehicle Registration		State	Vehicle Description		Year	Make		Model		Color											
	VIN		Vehicle Type		Special Vehicles Not Applicable				Private Trailer Type				Vehicle Defect									
	Automation System(s) in Vehicle		No		Automation System Level in Vehicle No Automation				Automation System Level Engaged at Time of Crash No Automation													
	Insurance Company #####				Insurance Policy # #####				Towed By				Towed To									
	Location of Greatest Damage		11	First Impact	11		Extent of Damage (Power Unit and/or Trailers) No Damage				Vehicle Direction		Vehicle Use				Action Prior Crossing Not at Intersect					
	Sequence of Events				First ● 17 - Motor Veh in Transport				Second				Third				Fourth					
					● indicates MOST harmful event)																	
PASSENGERS	Passenger Information								Date of Birth (Age)		Sex	Race	Position		Restraint							
									Injury	Ejected	Trapped	Airbag Deployed										
	Hospital								Ambulance													
	Passenger Information								Date of Birth (Age)		Sex	Race	Position		Restraint							
									Injury	Ejected	Trapped	Airbag Deployed										
	Hospital								Ambulance													
TRUCK / BUS	Carrier Information								USDOT				MC		MPSC							
									Driver's CDL Type				Endorsements OH OP OT ON OS OX		CDL Exempt <input type="radio"/> Farm <input type="radio"/> Other							
	GVWR/GCWR <input type="radio"/> 10,000 lbs. or Less <input type="radio"/> 10,001 - 26,000 lbs. <input type="radio"/> Greater than 26,000 lbs.				Vehicle Configuration				Cargo Body Type		Medical Card		Hazardous Material <input type="radio"/> Placard <input type="radio"/> Cargo Spill		ID #	Class #						
OWNERS	Owner Information								Owner Information													
WITNESS	Witness Information								Witness Information													
Investigated at Scene		Yes	Reported Date (Time)		12/03/2022 (16:50)		1st Investigator Name (Badge)				TOM FLITTON (972)				2nd Investigator Name (Badge)				Photos Yes			
Narrative								Diagram														
Unit 1 was SB on West Long Lake RD when it struck a pedestrian who was presumably in the road. Pedestrian suffered fatal injuries and Unit 1 fled the scene. Please refer to completed supplemental reports for further information related to this investigation.																						

NORTH Site Driveway
AM/PM



NOTE: For posted speeds at or under 45 mph, peak hour right turns greater than 40 vph, and total peak hour approach less than 300 vph, adjust right turn volumes.

Adjust peak hour
Right turns = Peak hour
Right turns – 20

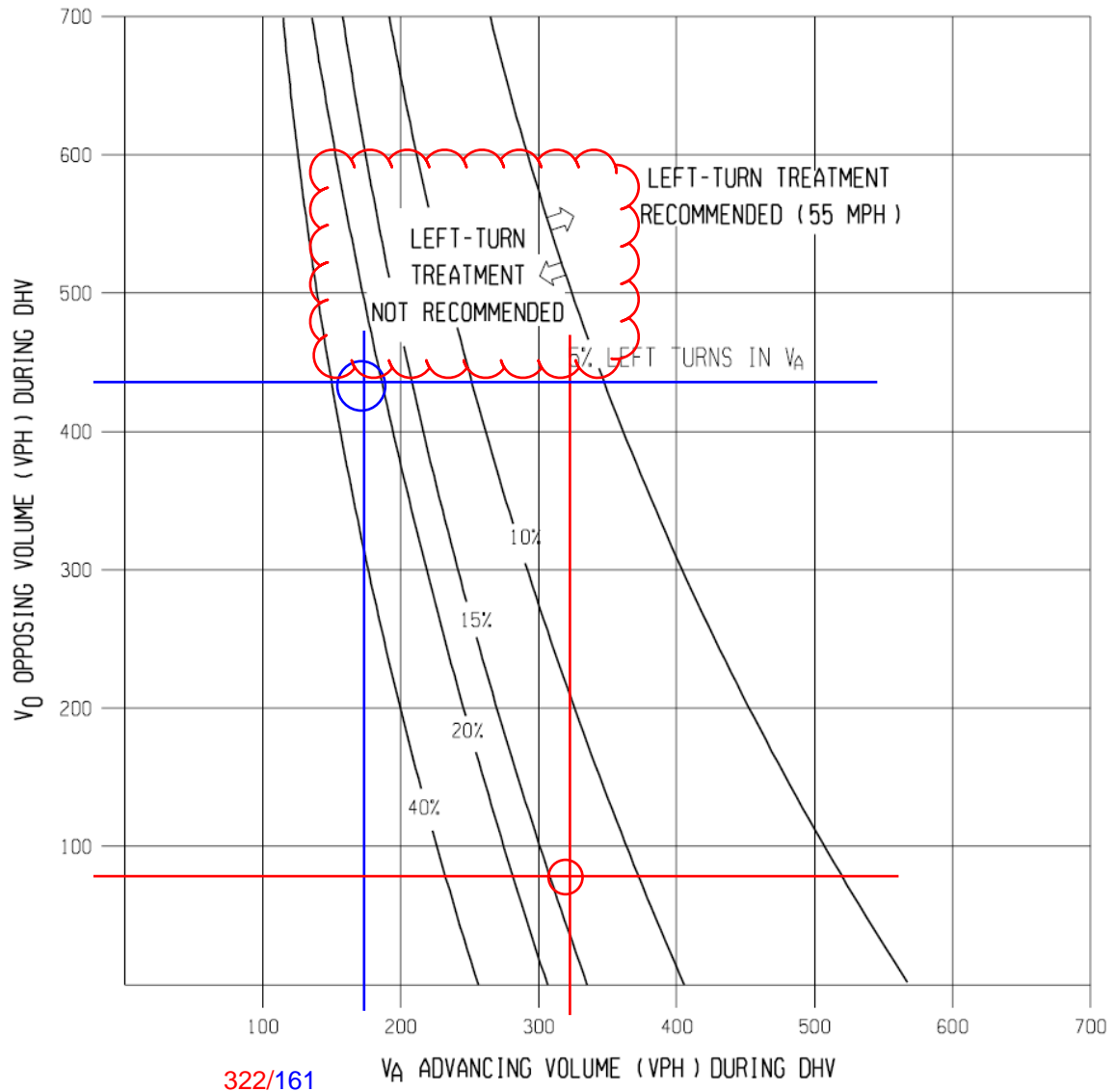


*If a center left-turn lane exists (ie 3 or 5 lane roadway), subtract the number of left turns in approach volume from the total approach volume to get an adjusted total approach volume.

Sample Problem: The Design Speed is 55 mph. The Peak Hour Approach Volume is 300 vph. The Number of Right Turns in the Peak Hous is 100 vph. Determine if a right turn lane is recommended.

Solution: Figure indicates that the intersection of 300 vph and 100 vph is located above the upper trend line; thus, a right-turn lane may be recommended.

TWO-LANE HIGHWAYS WITH A POSTED SPEED OF 55 MPH OR GREATER



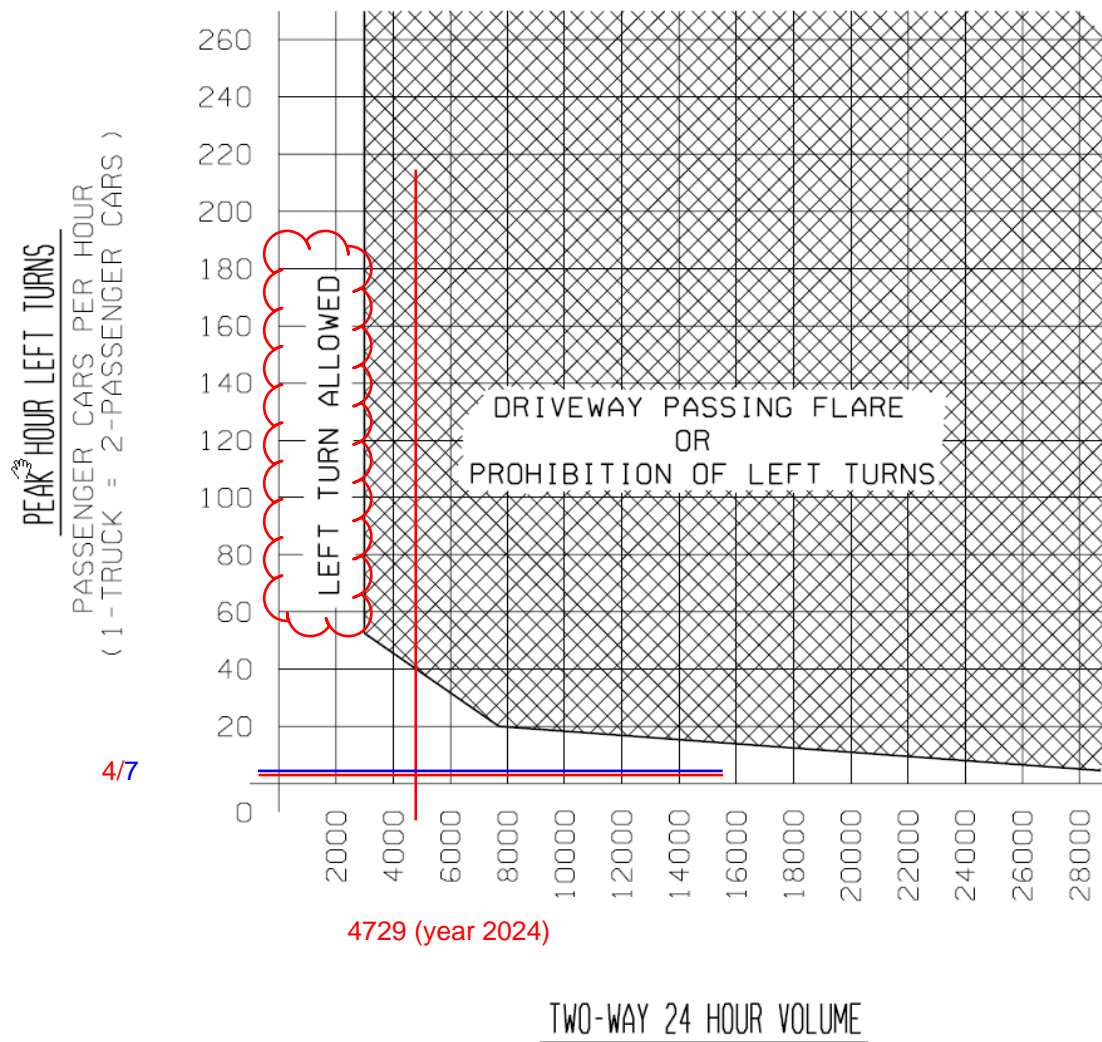
Instructions:

1. The family of curves represent the percentage of left turns in advancing volume (V_A). The designer should locate the curve for the actual percentage of left turns. When this is not an even increment of 5, the designer should estimate where the curve lies.
2. Read V_A and V_O into the chart and locate the intersection of the two volumes.
3. Note the location of the point in #2 relative to the line in #1. If the point is to the right of the line, then a left-turn lane is recommended. If the point is to the left of the line, then a left-turn is not recommended based on traffic volumes.

1.2.3 Traffic Volume Guidelines for Driveway Passing Flares

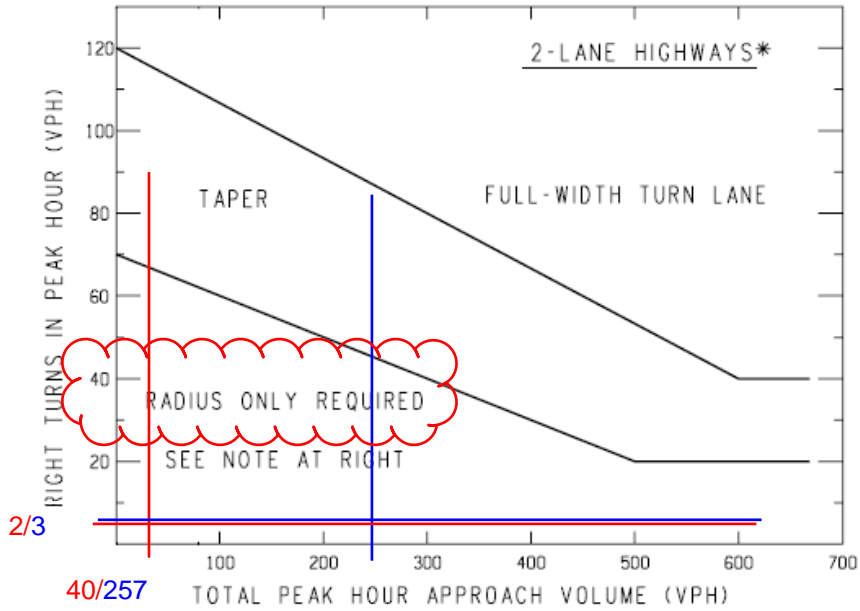
Driveways serving large developments along state trunkline highways frequently generate large numbers of left-turns. On two-lane, two-way roadways, this situation can aggravate the efficiency of traffic operations and often make shoulder maintenance difficult. In such situations, prohibition of left-turns at driveways to large developments or construction of driveway passing flares should be considered.

In an attempt to alleviate the types of problems outlined above, the following chart is provided showing the relationship between peak hour left-turns and 24-hour volumes. When peak hour left-turns and 24-hour volumes fall within the area above and to the right of the trend line, left-turns should be prohibited or a driveway passing flare be installed. If a driveway passing flare is constructed, the entire cost should be borne by the developer. For additional information and geometric design guidance regarding driveway passing flares, please refer to [Geometric Design Guide GEO-650](#).



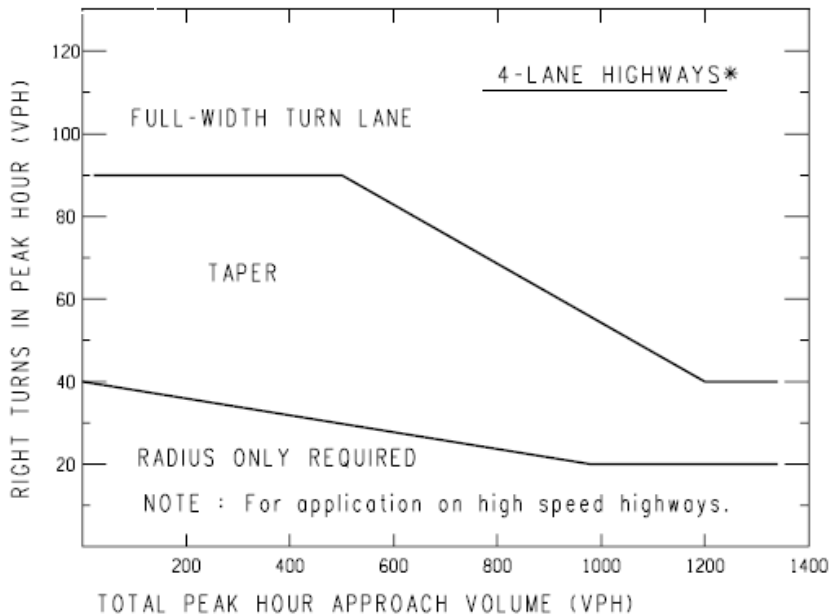
NOTE: This chart is based on Total Development and is for Two-Way Roadways.

WEST Site Driveway
AM/PM



NOTE: For posted speeds at or under 45 mph, peak hour right turns greater than 40 vph, and total peak hour approach less than 300 vph, adjust right turn volumes.

Adjust peak hour
Right turns = Peak hour
Right turns – 20

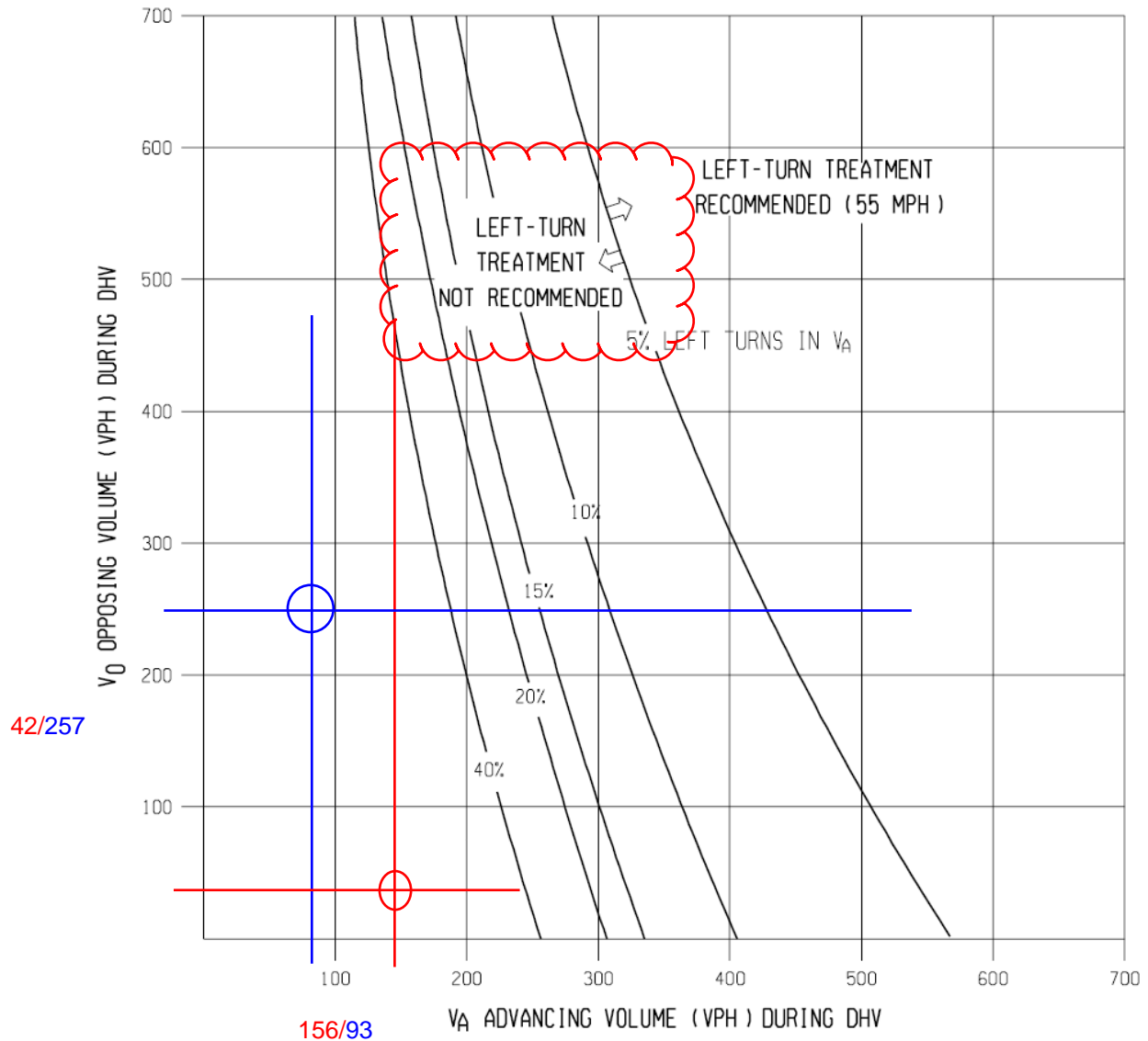


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TWO-LANE HIGHWAYS WITH A POSTED SPEED OF 55 MPH OR GREATER



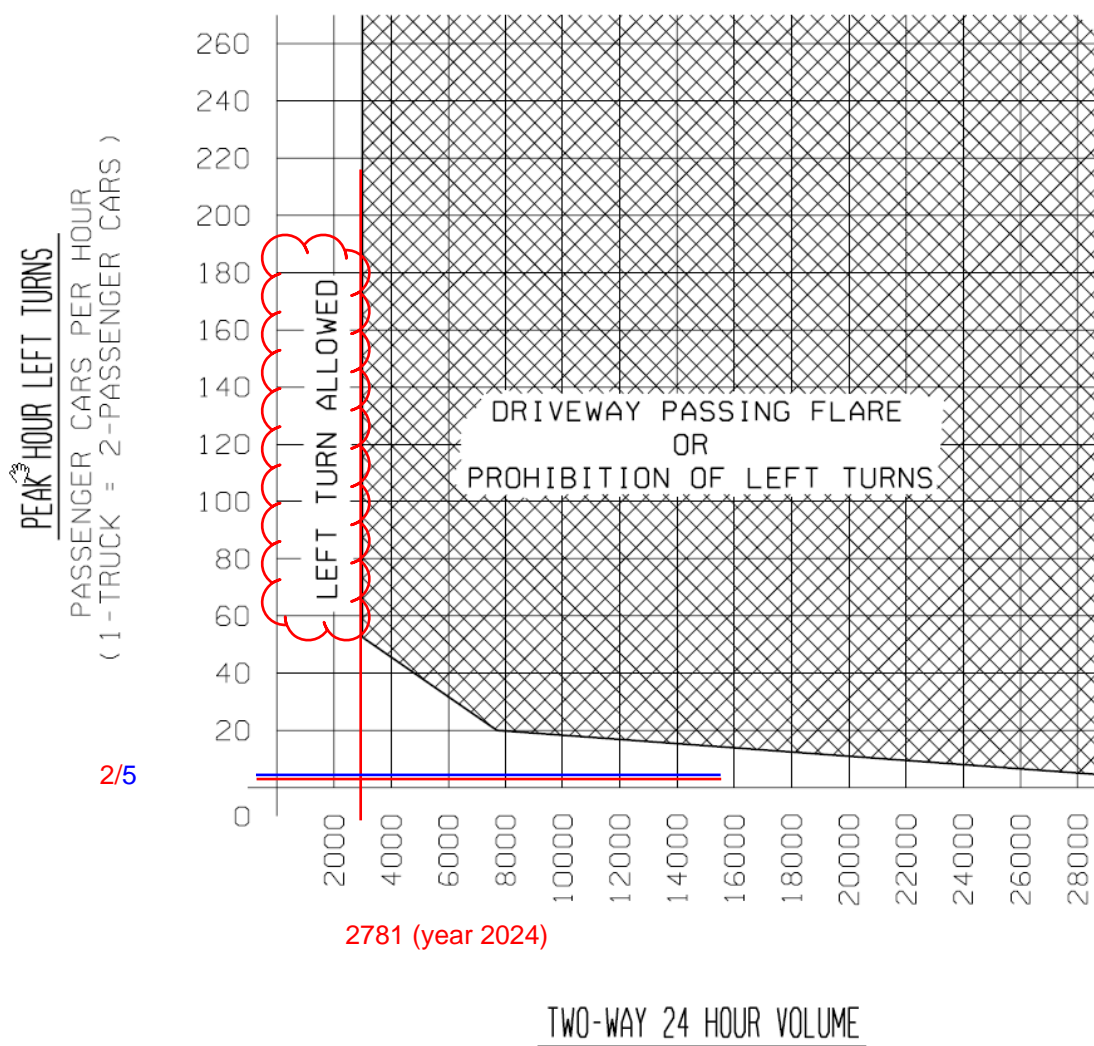
Instructions:

1. The family of curves represent the percentage of left turns in advancing volume (V_A). The designer should locate the curve for the actual percentage of left turns. When this is not an even increment of 5, the designer should estimate where the curve lies.
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NOTE: This chart is based on Total Development and is for Two-Way Roadways.

HCM 6th TWSC
1: W Long Lake Rd & N Long Lake Rd

2024 No-Build Conditions
a.m. Peak Hour

Intersection						
Int Delay, s/veh	5.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	139	16	8	182	44	29
Future Vol, veh/h	139	16	8	182	44	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	93	93	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	190	22	9	196	49	33





Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	263	49	82
Stage 1	49	-	-
Stage 2	214	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	726	1020	1515
Stage 1	973	-	-
Stage 2	822	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	721	1020	1515
Mov Cap-2 Maneuver	721	-	-
Stage 1	966	-	-
Stage 2	822	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.8	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1515	-	743	-	-
HCM Lane V/C Ratio	0.006	-	0.286	-	-
HCM Control Delay (s)	7.4	0	11.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	1.2	-	-

HCM 6th TWSC
1: W Long Lake Rd & N Long Lake Rd

2024 No-Build Conditions
p.m. Peak Hour

Intersection						
Int Delay, s/veh	2.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	63	31	44	98	221	210
Future Vol, veh/h	63	31	44	98	221	210
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	76	91	91	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	83	41	48	108	246	233





Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	450	246	479	0	-	0
Stage 1	246	-	-	-	-	-
Stage 2	204	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	567	793	1083	-	-	-
Stage 1	795	-	-	-	-	-
Stage 2	830	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	540	793	1083	-	-	-
Mov Cap-2 Maneuver	540	-	-	-	-	-
Stage 1	758	-	-	-	-	-
Stage 2	830	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.5	2.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1083	-	603	-	-
HCM Lane V/C Ratio	0.045	-	0.205	-	-
HCM Control Delay (s)	8.5	0	12.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.8	-	-

HCM 6th TWSC
1: W Long Lake Rd & N Long Lake Rd

2024 Build Conditions
a.m. Peak Hour

Intersection						
Int Delay, s/veh	5.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	141	17	9	185	47	31
Future Vol, veh/h	141	17	9	185	47	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	93	93	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	193	23	10	199	53	35




Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	272	53	88	0	-	0
Stage 1	53	-	-	-	-	-
Stage 2	219	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	717	1014	1508	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	817	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	712	1014	1508	-	-	-
Mov Cap-2 Maneuver	712	-	-	-	-	-
Stage 1	963	-	-	-	-	-
Stage 2	817	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.9	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1508	-	736	-	-
HCM Lane V/C Ratio	0.006	-	0.294	-	-
HCM Control Delay (s)	7.4	0	11.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	1.2	-	-

HCM 6th TWSC
2: N Long Lake Rd & N Site Driveway

2024 Build Conditions
a.m. Peak Hour

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	4	4	322	74	4
Future Vol, veh/h	3	4	4	322	74	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	92	92	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	5	4	350	83	4




Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	443	44	87	0	-	0
Stage 1	85	-	-	-	-	-
Stage 2	358	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	557	1017	1508	-	-	-
Stage 1	929	-	-	-	-	-
Stage 2	707	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	555	1017	1508	-	-	-
Mov Cap-2 Maneuver	555	-	-	-	-	-
Stage 1	926	-	-	-	-	-
Stage 2	707	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1508	-	750	-	-
HCM Lane V/C Ratio	0.003	-	0.011	-	-
HCM Control Delay (s)	7.4	0	9.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

HCM 6th TWSC
3: N Long Lake Rd & W Site Driveway

2024 Build Conditions
a.m. Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	156	38	2	2	2
Future Vol, veh/h	2	156	38	2	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	73	73	89	89	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	214	43	2	2	2





Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	45	0	0	264	44
Stage 1	-	-	-	44	-
Stage 2	-	-	-	220	-
Critical Hdwy	4.12	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	3.518	3.318
Pot Cap-1 Maneuver	1563	-	-	725	1026
Stage 1	-	-	-	978	-
Stage 2	-	-	-	817	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1563	-	-	724	1026
Mov Cap-2 Maneuver	-	-	-	724	-
Stage 1	-	-	-	976	-
Stage 2	-	-	-	817	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1563	-	-	-	849
HCM Lane V/C Ratio	0.002	-	-	-	0.006
HCM Control Delay (s)	7.3	0	-	-	9.3
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

HCM 6th TWSC
1: W Long Lake Rd & N Long Lake Rd

2024 No-Build Conditions
p.m. Peak Hour

Intersection						
Int Delay, s/veh	2.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	66	32	45	102	226	212
Future Vol, veh/h	66	32	45	102	226	212
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	76	91	91	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	87	42	49	112	251	236




Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	461	251	487	0	-	0
Stage 1	251	-	-	-	-	-
Stage 2	210	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	559	788	1076	-	-	-
Stage 1	791	-	-	-	-	-
Stage 2	825	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	532	788	1076	-	-	-
Mov Cap-2 Maneuver	532	-	-	-	-	-
Stage 1	752	-	-	-	-	-
Stage 2	825	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.7	2.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1076	-	595	-	-
HCM Lane V/C Ratio	0.046	-	0.217	-	-
HCM Control Delay (s)	8.5	0	12.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.8	-	-

HCM 6th TWSC
2: N Long Lake Rd & N Site Driveway

2024 No-Build Conditions
p.m. Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	9	7	161	429	10
Future Vol, veh/h	8	9	7	161	429	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	11	8	189	477	11




Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	688	244	488
Stage 1	483	-	-
Stage 2	205	-	-
Critical Hdwy	6.63	6.93	4.13
Critical Hdwy Stg 1	5.83	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.519	3.319	2.219
Pot Cap-1 Maneuver	396	757	1073
Stage 1	587	-	-
Stage 2	829	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	393	757	1073
Mov Cap-2 Maneuver	393	-	-
Stage 1	582	-	-
Stage 2	829	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.1	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1073	-	527	-	-
HCM Lane V/C Ratio	0.008	-	0.038	-	-
HCM Control Delay (s)	8.4	0	12.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 6th TWSC
3: N Long Lake Rd & W Site Driveway

2024 No-Build Conditions
p.m. Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	93	254	3	5	3
Future Vol, veh/h	5	93	254	3	5	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	76	76	90	90	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	122	282	3	6	4
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	285	0	-	0	420	284
Stage 1	-	-	-	-	284	-
Stage 2	-	-	-	-	136	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1277	-	-	-	590	755
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	890	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1277	-	-	-	586	755
Mov Cap-2 Maneuver	-	-	-	-	586	-
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	890	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.4	0		10.7		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1277	-	-	-	640	
HCM Lane V/C Ratio	0.005	-	-	-	0.015	
HCM Control Delay (s)	7.8	0	-	-	10.7	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0	

Queuing and Blocking Report

2024 Build Conditions

a.m. Peak Hour

Intersection: 1: W Long Lake Rd & N Long Lake Rd

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	70	16
Average Queue (ft)	29	1
95th Queue (ft)	53	9
Link Distance (ft)	353	646
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: N Long Lake Rd & N Site Driveway

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	6
95th Queue (ft)	25
Link Distance (ft)	270
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: N Long Lake Rd & W Site Driveway

Movement	SB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	4
95th Queue (ft)	22
Link Distance (ft)	264
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 0

Queuing and Blocking Report

2024 No-Build Conditions

p.m. Peak Hour

Intersection: 1: W Long Lake Rd & N Long Lake Rd

Movement	EB	NB	SB
Directions Served	LR	LT	R
Maximum Queue (ft)	59	63	22
Average Queue (ft)	22	14	1
95th Queue (ft)	42	41	10
Link Distance (ft)	353	646	179
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: N Long Lake Rd & N Site Driveway

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	40	40
Average Queue (ft)	12	4
95th Queue (ft)	38	22
Link Distance (ft)	270	179
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: N Long Lake Rd & W Site Driveway

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	5	35
Average Queue (ft)	0	7
95th Queue (ft)	4	28
Link Distance (ft)	448	264
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

MEMORANDUM

LONG LAKE TOWNSHIP PLANNING DEPARTMENT

TO: Long Lake Township Planning Commission

FROM: Leslie Sickterman, Township Planner

DATE: August 16, 2023

SUBJECT: REVISED Site Plan Review for Residential Planned Unit Development
Applicant Dan Paulson and Owner M. Sue Kelly
Evergreen CLU 08-22-07 & SPR 08-28-12
Property ID 28-08-001-021-42

PROPOSAL AND BACKGROUND

In October of 2022, the Planning Commission approved a Residential PUD for the subject development with several conditions. The development as approved includes 126 attached townhouse-style units in 30 buildings – 27, 4-unit buildings and 3, 6-unit buildings. At this time, the applicant is requesting approval of the addition of a phasing plan to the approved site plan. The phasing plan includes 7 phases, with 12 to 28 units in each phase.

The applicant has noted that the phasing may be such that several phases are constructed all at once, but if the market and economy are such that sales are slow, the 7 separate phases are a possibility.

Considerations include the following:

Access and Circulation The most significant aspect of any phasing plan is whether there is adequate circulation and emergency access for each phase of the development.

- The first phase (16 units) will have a single point of access onto Gray Road on “C” Street, and a portion of “F” Street which will serve as a turnaround area for vehicles, and a parking area for overflow guests.
- The second phase will result in a total of 32 units, a looped road system with the addition of “B” Street attached to “C” Street, and a second point of access onto Gray Road. This phase will also include the construction of the neighborhood center building (housing a private meeting room and mailbox/package delivery area for use by all units).
- The third phase will result in a total of 48 units with no new road construction as the additional units will be served by “B” Street.
- The fourth phase will result in a total of 60 units, most of these additional units will be served by the previously built sections of Streets “B” and “C”, and includes the construction of the remainder of “F” Street and all of “E” and “D” streets.
- The fifth phase will result in 76 total units and will be served by the existing “C” Street

- The sixth phase will result in 104 total units. All new units will be served by the roads constructed in phase 4.
- Lastly, phase 7 will include the final 22 units for a total of 124. “A” Street and the last section of “F” Street will be constructed with this final phase.

Open Space and Public Benefit

The development was approved as a Residential Planned Unit Development. In order to qualify for approval under this option, there are several standards that were found to be met. These standards should continue to be met for each phase of development.

- Most of the recognized community benefits will be accrued with the development of the project starting with the first phase. These include: net zero energy efficient buildings, innovative pocket neighborhood design concept, and connection to public water supply.
- Some recognized benefits that are a requirement of development may not be accomplished with the first phase. These include: shared amenities including the community building, trailways, entranceway landscaping, buffering along the north and south property lines, and invasive species controls.

RECOMMENDATION

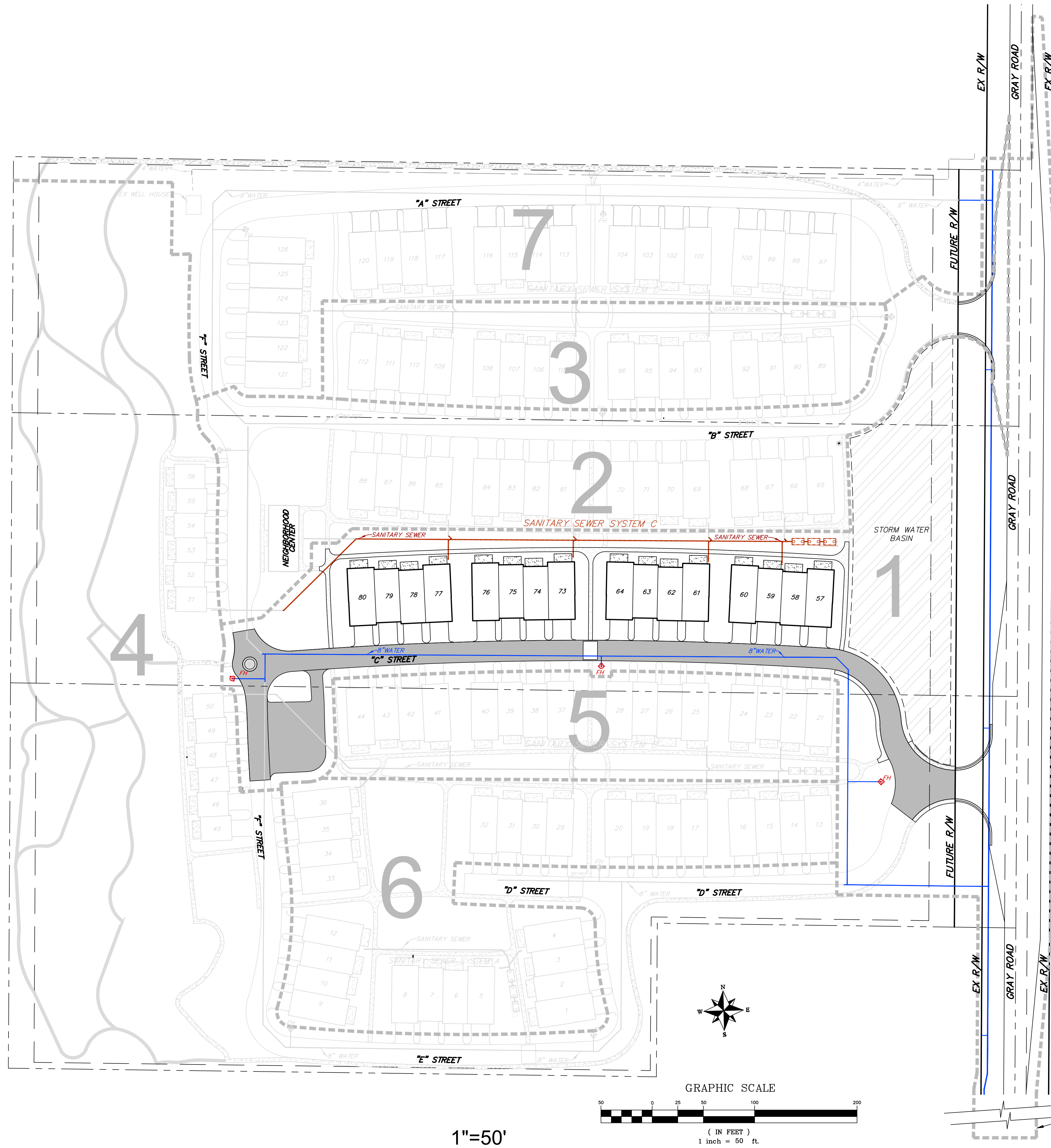
Staff recommends that, if all of the forgoing elements are not proposed to be developed with the first phase, that the following conditions will apply:

- The designated open space areas to be available for use by all residents through easements beginning with the first phase
- The entranceway landscaping and related irrigation to be installed in the first phase
- The buffering landscaping on the north and south property lines to be installed at the time that the roads adjacent to these property lines are constructed
- The invasive species controls suggested by Daniel Schillinger to be undertaken with the first phase
- The trailways and the community center to be constructed within 4 years of the issuance of the conditional land use permit

Continuation of the following conditions placed by the Planning Commission at the time of the original approval:

1. Favorable review by the township engineer, including any additional submittals that may be necessary to complete this review.
2. Submittal of condominium master deed and bylaws for staff review prior to recording. Condominium documents to address permanent protection of the open space as shown on the site plan, continued maintenance of the trails, landscaping, stormwater facilities, all utilities, and roadways within the project.
3. Obtaining a private road permit from the township prior to the construction of any roads. Roads must be completed prior to, or, with approval from the township, concurrent with construction of buildings.
4. All buildings will require individual land use permits issued by the Township.

5. Final approval by the Fire Department including numbers and locations of fire hydrants.
6. Approval as necessary by all outside agencies, not limited to EGLE.
7. Submittal of lighting details for administrative approval. Lighting must be compliant with township dark sky standards.
8. The community building to be for the use of the residents of the Evergreen development only. Separate approval from the Planning Commission will be required for any use other than a private meeting room and shared mail room at this location.
9. The applicant to work cooperatively with Township staff to finalize screening details to ensure that the neighboring properties are not impacted by glare or excessive noise from this development. Landscaped buffer areas to be irrigated and mulched to ensure the viability of the plantings.
10. Approval to be extended for five years from the date of issuance of a CLU permit. Meaningful progress to be made toward completion of the project within this timeframe.
11. Submittal of traffic impact information.



ABBREVIATIONS

AC	ASPHALT CONCRETE	IRR
ACP	ASBESTOS CONCRETE PIPE	LAT
BC	BEGINNING OF CURVE	MC
BSG	BEGINNING	NH
BF	BOTTOM OF FOOTING	N
BIT	BITUMINOUS	(N)
BOT	BOTTOM	NAT
BP	BOTTOM OF PIPE	NLY
BR	BOTTOM OF RISER	NTS
BTWN	BETWEEN	OC
BW	BACK OF WALK	PA
CB	CATCH BASIN OR CURB BASK	PE
CL	CURB FACE	POC
CF	CENTERLINE	PP
CO	CLEANOUT	PROT
CONC	CONCRETE	PT
CPVC	CHLORINATED PVC	PVC
DI	DRAINAGE INLET	FVMT OR P
DIP	DUCTILE IRON PIPE	RCP
DIR	DISTANCE OR DISTRICT	RL
DR	DRIVE	RW
DRWY	DRIVEWAY	S
E	EAST	SD OR ST
(E) OR EX	EXISTING	SS OR SAN
EC	END OF CURVE	SHT
ELEC	ELECTRIC	SLY
EL	EASTERLY	STL
EG	EDGE OF GUTTER OR EX. GROUND	ST
EP	EDGE OF PAVEMENT	TC
ESMT	EASEMENT	TEL
FG	FINISHED GRADE	TG
FL	FIRE HYDRANT	TOP
FH	FLOW LINE	TT
FS	FINISHED SURFACE	TW
G	NATURAL GAS	YAP
GB	GRADE BREAK	V
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	VERT
G	GROUND SURFACE	W
HDPE	HIGH DENSITY POLYETHYLENE	WI
HMA	HOT MIXED ASPHALT	WLY
HP	HIGH POINT OR HIGH PRESSURE	W/O
HVAC	HEATING, VENTILATION AND AIR CONDITIONING	X
INV	INVERT	

	IRRIGATION	EXISTING OR FUTURE RW
	LATITUDE OR LATERAL	PROPERTY LINE
	MIDDLE OF CURVE	STREET CENTERLINE
	MANHOLE	EASEMENT-WATER
	NORTH OR NEW	ELECTRIC-OVERHEAD
	NEW	GAS
	NATURAL	FIBER OPTIC
	NORTHERLY	TELEPHONE
	NOT TO SCALE	FLOWLINE-HARDSCAPE
	ON CURB OR ON CURVE	FLOWLINE-GROUND SURFACE
	POLYAC AC	DRAINAGE DIRECTION/SLOPE
	PLAIN END OR POLYETHYLENE	GRADE BREAK-HARDSCAPE
	POINT OF CONNECTION	CONCRETE CURB
	POWER POLE	CONCRETE WALL
	PROTECT	FENCE
	POINT	EX LIGHT STANDARD
	POLYVINYL CHLORIDE	
	PAVEMENT	EX STREET LIGHT
	REINFORCED CONCRETE PIPE	
	RIDGE LINE	REMOVAL EXTENTS
	RIGHT OF WAY	
	SOUTH	EXPANSION JOINT
	STORM DRAIN	CONTROL JOINT
	SANITARY SEWER	
	SHEET	CONCRETE/EX CONCRETE
	SOUTHERLY	
	STEEL	
	STREET	ASPHALT/EX ASPHALT
	TOP OF CURB	
	TELEPHONE	
	TOP OF GRATE	GRAVEL/EX GRAVEL
	TOP OF PIPE	
	TOP OF TREAD	
	TOP OF WALL	
	TYPICAL	
	VARIABLE OR VARIES	
	VERTICAL	PHASE NUMBER
	WEST	
	WITH	
	WESTERLY	
	WITHOUT	
	CROSS	

LEGEND

EXISTING OR FUTURE R/W
PROPERTY LINE
STREET CENTERLINE
EASEMENT-WATER
ELECTRIC-OVERHEAD
GAS
FIBER OPTIC
TELEPHONE
FLOWLINE-HARDSCAPE
FLOWLINE-GROUND SURFACE
DRAINAGE DIRECTION/SLOPE
GRADE BREAK-HARDSCAPE
CONCRETE CURB
CONCRETE WALL
FENCE
EX LIGHT STANDARD
EX STREET LIGHT

REMOVAL EXTENTS

EXPANSION JOINT
CONTROL JOINT

CONCRETE/EX CONCRETE

ASPHALT/EX ASPHALT

GRAVEL/EX GRAVEL

(NEW|EX)

NOTE:

PHASE 1 INCLUDES CONNECTION TO WATERMAIN AT CEDAR RUN ROAD, INSTALLATION OF WATERMAIN ALONG GRAY ROAD TO THE SITE'S NORTHERLY PROPERTY LINE, THE SOUTHERLY DRIVEWAY, PAVED TAPERS AND BYPASS LANE OR LEFT TURN LANE AS APPROPRIATE, AND CONSTRUCTION OF THE STORM WATER BASIN.

NOT FOR CONSTRUCTION

CIVIL DESIGN PREPARED
UNDER THE SUPERVISION
OF MARK A LUND, PE:



Prince-Lund
Engineering, PLC

P.O. Box 1268, Traverse City, Michigan 49685
(888) 418-2695
www.princelund.com

PREPARED BY:	REP
SCALE:	AS NOTED
DATE:	8/11/2023
PROJECT ID:	

DRAWING:

C1.0

PHASING INDEX HIGHLIGHTING PHASE 1
AND LAND DIVISION
EverGreen TC Development
5149 Gray Road
Traverse City, Michigan 49684

REVISIONS

0	REP NOTED /2023	(888) 418-2695 www.princelund.com	3149 Gray Road Traverse City, Michigan 49684	DESCRIPTION	DATE	BY
© Copyright Prince-Lund Engineering, PLC 2023. All rights reserved. Use of these Plans is governed by the terms of an End User License Agreement (EULA) that accompanies these plans. By using these plans, the user confirms acceptance of the EULA. If the EULA is not attached to these plans, it may be obtained by contacting Richard E. Prince at rickp@princelund.com						

MEMORANDUM

LONG LAKE TOWNSHIP PLANNING DEPARTMENT

TO: Long Lake Township Planning Commission

FROM: Leslie Sickterman, Township Planner

DATE: August 17, 2023

SUBJECT: Extension for Cedar Run Acres Subdivision without Significant Open Space
Property ID 28-08-013-20, 28-08-003-013-00, 28-08-003-013-10

BACKGROUND

The Planning Commission approved this application for a 21-lot site condominium, approved under the Subdivision Without Significant Open Space development option in May 2021. In June 2021, the Planning Commission approved an amended version of the plan to address small changes needed to meet all minimum dimensional requirements and to remove the portion of proposed unit 13 that was part of the future road set aside.

Since this time, the developer sold the development to builder Corey Flaska. The new owner has taken the necessary steps to change the name of the development (from Cedar Run Shadow to Cedar Run Acres), to be designated the developer for this site condominium, and to obtain approvals for new road names in the development. The owner has obtained an extension to the soil erosion permit and has begun the process to receive private road permits from the Township.

STAFF RECOMMENDATION

At this time, staff is recommending that the Planning Commission acknowledge the change in the developer and name for the development and extend the conditional use approval for two years.

Staff recommends approval of the proposal subject to the following:

1. Conditioned on approval of the master deed and bylaws by the Township's attorney or staff.
Master Deed to include the following:
 - a. Notification to future unit owners that the home owners association will be solely responsible for the ongoing maintenance and repair of the private roads and other specific language detailed in the township's Private Road ordinance.

- b. The condominium documents will also indicate that 3 deciduous trees must be planted in the front yard of each lot at the time of home construction.
 - c. The condominium documents will include language to limit removal of existing vegetation outside of the area required for the construction of a house and septic system on proposed lots 2 through 7
- 2. Conditioned on final approval of setbacks by staff
- 3. Subject to approvals and necessary permits from outside agencies



Leelanau Construction

9075 Kasson Rd

PO Box 293

Cedar, MI 49621

231-7159440

office@leelanauconstruction.com

To Long Lake Township:

My name is Corey Flaska and I'm the owner of Leelanau Construction. I have purchased a previously approved Site Condo from Mark Gabrick. Formerly Called Cedar Run Shadow parcel number 28-08-003-013-00, 28-08-013-10, 28-08-013-20. I have changed the name of the development to Cedar Run Acres. Previously this development and site plan was approved with no expiration date. Today I'm writing to let you know I have taken over ownership and will develop and build all 21 houses through Leelanau Construction as previously approved. Please approve the new name. If an extension of some sort is needed, please grant Cedar Run Acres LLC the extension. We intend to start this project Spring of 2024.

Thanks

Corey Flaska

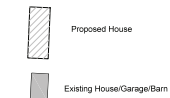
CEDAR RUN ACRES CONDOMINIUM

PART OF THE SW 1/4 OF SEC. 3
TOWN 27 NORTH, RANGE 12 WEST,
LONG LAKE TWP., GRAND TRAVERSE CO., MICHIGAN.

Grading or removal of vegetation outside what is necessary for the construction of any building or structure for what is necessary for storm water control or is otherwise outside of any approved utility plan, is strictly prohibited on Units 3, 4, 5 and 6.

Co-owners shall not remove any living trees or vegetation, outside of that necessary to construct the home and install the septic system, without the written consent of the Committee on Units 3, 4, 5 and 6.

STORMWATER DRAINAGE CALCULATIONS
SEE SHEET 3B FOR STORMWATER DESIGN



Legend
● IRON FND
▲ P.K. FND
▲ P.K. SET
◆ MONUMENT FND
(R) RECORD
(M) MEASURED
+ SEPTIC TEST HOLE
--- Setbacks
50' Front
15' Side
40' Rear

SOIL BORING LOG
(11/24/98)
GTCHD Permit GT 28315

SB-1 (5/6)
0-8" Topsoil
8-2" Reddish Loamy Sand
2-2" Light Brown Sand
5-5" Tan Sand

SB-2 (4/5)
0-14" Topsoil
14-2.5" Reddish Loamy Sand
2.5-4" Light Brown Sand
4-7" Tan Sand

SB-3 (3/4)
0-1" Topsoil
1-13" Brown Loamy Sand
3-7" Tan Sand

SB-4 (1/2)
0-8" Topsoil
8-5" Brown Loamy Sand
3-7" Tan Sand

SB-5 (10/11)
0-1" Topsoil
1-13" Brown Loamy Sand
3-7" Tan Sand

SOIL BORING LOG
(08/09/2021)
SB-8 (10)
0-8" Sandy Loam Topsoil
8-12" Sandy Loam
12-88" Loamy Sand
88-72" Medium Sand
72" < Groundwater

SB-11
0-12" Sandy Loam Topsoil
12-24" Sandy Loam
24-72" Loamy Sand
72-40" Medium Sand
60" < Groundwater

SB-12
0-8" Sandy Loam Topsoil
8-18" Sandy Loam
18-78" Loamy Sand
78" < Groundwater

SOIL BORING LOG
(08/22/2023)

SB-6 (7/8)
0-8" Topsoil
8-1.5" Red Brown Loamy Sand
1.5-7" Light Brown Loamy Sand
7-11" Loamy Sand
11-72" Loamy Sand
72" < Groundwater

SB-7 (E/F)
0-1" Topsoil
1-2" Red Brown Loamy Sand
2-5.7" Light Brown Sand

SB-8 (7/8)
0-8" Topsoil
8-2" Red Loamy Sand
2-7" Light Brown & Loamy Sand

SB-9 (7/8)
0-1" Topsoil
1-2" Red Loamy Sand
2-7" Light Brown & Loamy Sand

SB-13
0-12" Sandy Loam Topsoil
12-18" Sandy Loam
18-38" Loamy Sand
38-60" Medium Sand
60-72" Loamy Sand
72" < Groundwater

SB-14
0-8" Sandy Loam Topsoil
8-36" Loamy Sand
36-84" Medium Sand
84" < Groundwater

SB-15
0-10" Sandy Loam Topsoil
10-16" Sandy Loam
16-42" Loamy Sand
42-72" Medium Sand
72" < Groundwater

NOTE:
SEE PRELIMINARY EXHIBIT "B"
SURVEY PLAN FOR DIMENSIONAL
DETAILS OF PROPOSED UNITS.



Scott D. McLain PS 40101 57817

CURVE	RADIUS	ARC	CHD BEARING	CHORD	DELTA
C1	30.00	45.57	S 42° 19' 28" E	41.89	89° 49' 31"
C2	30.00	47.59	N 41° 24' 11" E	42.49	89° 50' 28"
C3	30.00	47.59	S 42° 39' 20" E	40.39	89° 50' 31"
C4	30.00	47.17	N 41° 31' 11" E	42.49	89° 50' 27"

PROPOSED SITE CONDOMINIUM

Michigan Geomatics



5422 Goodrick Road
Traverse City, MI 49684
(231) 325-2855
MichiganGeomatics.com

CLIENT: Scott Corey Flaska
CEDAR RUN ACRES CONDOMINIUM

OWNER: CEDAR RUN ACRES, LLC
P.O. BOX 293
CEDAR, MI 49821

JOB NUMBER: 20-3323

DATE: MARCH 1, 2021

REVISIONS:
1: 05/05/2021 - Stormwater design
2: 06/15/2021 - Remove Outlet from Unit 13
3: 06/24/2023 - Change Developer and Road Names - Additional Soil Borings
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PLANNERS REPORT

TO: Long Lake Township Board

FROM: **Leslie Sickterman**

DATE: May 4, 2023

RE: April Monthly Report

Development Proposals.

At its April meeting, the Planning Commission approved an alteration to the shared boundary of Hills of Huellmantel and Huellmantel Ridge site condominiums. This proposal includes alterations to unit lot lines and open space in both developments.

In May, the Planning Commission will hold a public hearing on an amendment to the Future Land Use Plan in the current Master Plan as approved for distribution by the Township Board in March. In June, the Planning Commission will hear another request for a rezoning.

Staff has discussed other early-stage applications for a commercial day care center expansion, another commercial preschool, a large home daycare, and a possible major home occupation.

Staff Activities. Other projects that staff is working on and upcoming include:

- Short term rental application reviews continue for 2023. Staff has been researching new compliance monitoring software options, possible changes to the ordinance, and raising the fee for 2024.
- Follow through with approved development projects, private roads, and compliance review continues.
- Training of new staff for the STR program.
- Continued training and webinars for all of the P&Z staff.
- Planner was on vacation for the last two weeks of April.

Permit List

08/01/2023

Permit	Address	Issued	Status	Category	Permit Fees
PCL06-23-03	4677 SANDTRAP DR	07/05/2023	ISSUED	Conditional Land Use	\$550.00
P09282	4599 CEDAR LAKE RD	07/05/2023	ISSUED	Accessory Building - Detached	\$50.00
P09284	2468 TYLER HILLS DR	07/05/2023	ISSUED	Solar-array	\$50.00
P09285	5162 TILTON RD	07/05/2023	ISSUED	Porch, covered	\$30.00
P09287	4697 BIRDIE LN	07/06/2023	ISSUED	Miscellaneous Structures	\$30.00
P09288	533 FISHER RD	07/11/2023	ISSUED	Accessory Building - Detached	\$50.00
P09289	10138 N LONG LAKE RD	07/11/2023	ISSUED	Com, New Structure	\$100.00
P09290	10138 N LONG LAKE RD	07/12/2023	ISSUED	Com, New Structure	\$100.00
P09291	10138 N LONG LAKE RD	07/12/2023	ISSUED	Com, New Structure	\$100.00
P09292	10138 N LONG LAKE RD	07/12/2023	ISSUED	Com, New Structure	\$100.00
P09293	1737 BASS LAKE RD	07/12/2023	ISSUED	Accessory Building - Detached	\$50.00
P09294	2968 CRESCENT SHORE	07/12/2023	ISSUED	Accessory Building - Detached	\$50.00
P09295	2721 OLD BARN RD	07/13/2023	ISSUED	Deck	\$30.00
P09296	5118 GAUTHIER LN	07/19/2023	ISSUED	Porch, covered	\$30.00
P09297	711 BASS LAKE RD	07/19/2023	ISSUED	Accessory Building - Detached	\$50.00
P09298	2721 OLD BARN RD	07/19/2023	ISSUED	Accessory Building - Detached	\$50.00
P09299	1369 READS RUN	07/20/2023	ISSUED	Home Occupation/Minor	\$50.00
P09300	10235 N LONG LAKE RD	07/21/2023	ISSUED	Travel Trailer - Temporary	\$30.00
P09301	9640 WOODYS RUN	07/21/2023	ISSUED	Porch, covered	\$30.00
P09302	1508 BANNISTER RD	07/25/2023	ISSUED	Accessory Building - Detached	\$50.00

Total Permits: 20

Total Fees: \$1,580.00

ZONING DEPARTMENT
Matthew Jerome, Zoning Administrator

Monthly Land Use Permits Issued - Year to Date 2023		Commercial/Industrial, Agricultural	Home Occupation	Single Family Dwelling Mobile Homes	Multiple-Attached "SFD" (# represents units)	Apartment Complex	Dwelling Add/Change of Use to living	Garage/Det Acces Bldg or Addition to same	Deck/Porch/Demolition	Miscellaneous	CLU/SPR/ADMIN SPR/PRR	Total Permits			Number of Apartment Units
Date	Permit #												Fee	Fee Cumul. Total	
January	9180 / 9183-9187			1			1	2		2		6	\$280	\$280.00	
February	9188 - 9192						2	1	2			5	\$150	\$430.00	
March	9193-915	3		6			3	3	2	2	1	20	\$1,040	\$1,470.00	
April	9216-9232	3		1			3	4	3	3	1	18	\$1,350	\$2,820.00	
May	9233-9251			7			1	3	4	4	3	22	\$1,940	\$4,760.00	
June	9252-9281			4	2		3	5	5	10		29	\$1,110	\$5,870.00	
July	9282-9302	4	1					7	4	3	1	20	\$1,580	\$7,450.00	
August															
September															
October															
November															
December															
TOTALS		10	1	19	2	0	13	25	20	24	6	120	\$7,450		

ZONING DEPARTMENT

Matthew Jerome

Zoning Administrator

Long Lake Township Monthly Land Use Permits Issued - Year to Date 2022		Commercial/Industrial, Agricultural	Home Occupation	Single Family Dwelling Mobile Homes	Multiple-Attached "SFD" (# represents units)	Apartment Complex	Dwelling Add/Change of Use to living	Garage/Det Acces Bldg or Addition to same	Deck/Porch/Demolition	Miscellaneous	CLU/SPR/ADMIN SPR/PRR	Total Permits			Number of Apartment Units
Date	Permit #												Fee	Fee Cumul. Total	
January	8970 - 8980	0	0	2	0	1	1	1	3	2	0	10	\$2,070	\$2,070.00	36
February	8981 - 8990	1	2	0	0	0	2	2	2	1	0	10	\$420	\$2,490.00	0
March	8991 - 9013	0	2	3	0	0	2	5	7	4	1	24	\$1,520	\$4,010.00	0
April	9014 - 9026	0	0	3	0	0	2	1	2	5	4	17	\$2,580	\$6,590.00	0
May	9028 - 9056	0	0	2	0	0	6	6	5	9	0	28	\$940	\$7,530.00	0
June	9057-9083	1	0	1	0	0	3	8	4	8	2	27	\$1,270	\$8,800.00	0
July	9085 - 9108	2	0	3	0	0	1	7	1	9	1	24	\$ 1,340	\$10,140.00	0
August															
September															
October															
November															
December															
TOTALS		4	4	14	0	1	17	30	24	38	8	140		\$10,140.00	36

ZONING DEPARTMENT
Matthew Jerome, Zoning Administrator

Long Lake Township Monthly Land Use Permits Issued - Year to Date 2021		Commercial/Industrial, Agricultural	Home Occupation	Single Family Dwelling	Multiple-Attached "SFD" (# represents units)	Dwelling Add/Change of Use to living	Garage/Det Acces Bldg or Addition to same	Mobile Home	Deck/Porch/Demolition	Miscellaneous	CLU/SPR/ADMIN SPR/PRR	Total Permits		
Date	Permit #												Fee	Fee Cumul. Total
January	8781 - 8784	1	0	0	0	3	0	0	0	0	2	6	\$960	\$960.00
February	8785 - 8794	0	0	2	0	7	1	0	0	0	1	11	\$830	\$1,790.00
March	8795 - 8809	1	0	0	0	5	3	0	3	3	3	18	\$1,230	\$3,020.00
April	8810 - 8831	2	0	5	0	5	3	0	3	2	3	23	\$1,590	\$4,610.00
May	8832 - 8843	3	0	3	0	2	1	0	2	2	0	13	\$650	\$5,260.00
June	8844 - 88860	0	0	2	0	1	6	0	4	4	0	17	\$610	\$5,870.00
July	8861 - 8881	3	0	5	0	2	7	0	2	2	1	22	\$1,600	\$7,470.00
August														
September														
October														
November														
December														
TOTALS		10	0	17	0	25	21	0	14	13	10	110		\$7,470.00